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Tocharian Bilingualism, Language Shift, and Language Death in the Old Turkic Context

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ABSTRACT

The death of a language is a sad and dramatic event. It is, however, a fact that many languages died out in the past and are now dying out as well. However, although we often know the time and causes of present or recent language deaths and have a relatively large amount of information about them, we often do not know the time and causes of past language deaths, or our knowledge of these processes is very limited. In other words, the very limited written sources or linguistic material make it very difficult to study “language shift” or “language death” phenomena in historical periods.

This is also true for Tocharian languages named A and B of Indo-European origin that are extinct. Namely, we do not know at all what happened to the Tocharians, when, how, and why they disappeared, or when the Tocharian languages died out. This study tries to solve these fundamental questions from the perspective of Turkic historical linguistics. In connection with this, the Turkic background of Tocharian-Turkic interethnic and linguistic contact is first examined in order to understand how the Tocharian-Turkic language contact came about in the first place and how long it lasted. Based on the most current archaeological, historical, philological, and linguistic data, the study tentatively divides these relationships into three major stages, which better describe the spatial and temporal dimensions of Tocharian-Turkic relations. However, only the last period (ninth–thirteenth centuries) is subjected to detailed examination in the study. It examines what kinds of historical, socio-cultural, socio-political, sociolinguistic, and other extralinguistic factors were responsible for the

process of Turkization of Tocharians. It also gives a detailed description of every stage of the language shift and language death processes in the Old Turkic context, both factually and theoretically, using all available evidence. Some of the linguistic output of these processes in Turkic is also briefly discussed.

The study also identifies a previously unknown Tocharian A tribe, the *Argu*, which has so far escaped the attention of researchers. *Argu* (< *Argi* < **Arki* > *Ārsī*) was a bilingual Karakhanid Turkic tribe in the late eleventh century. They were undoubtedly the descendants of Yuezhi (i.e., Tocharian A speakers) in the south of the Ili Valley, where Chinese sources mention Yuezhi, who migrated there from Gansu (China) in 162 BCE.

Key words: Tocharian, Tocharians, Yuezhi, Old Turkic, Uyghurs, language contact, language shift, language death, historical linguistics.

INTRODUCTION

The death of a language is a sad and dramatic event. It is, however, a fact that many languages died out in the past and are dying out now as well. It is well-known that today at least one language death occurs on average every two weeks. What is worse, as has long been known, is that “over half of the world’s languages are moribund, i.e., not effectively being passed on to the next generation.”¹

However, although we often know the time and causes of present or recent language deaths and have a relatively large amount of information about them, we frequently do not know the time and causes of past language deaths, or our knowledge of these processes is very limited. In other words, the scarce written sources or linguistic materials make it very difficult to study language shift or language death phenomena in historical periods.

This is also true for Tocharian, an archaic Indo-European language that is now extinct. Namely, we do not know at all what happened to Tocharians, how and why they disappeared, or when the Tocharian languages (A and B) died out. The present study seeks answers to these cardinal questions. As for the goals of the present article, (1) first, I attempt to clarify the Turkic background of Tocharian-Turkic interethnic and linguistic contact. And (2) because I think that the Tocharians in the Tarim Basin were gradually Turkicized, I try to determine what kinds of historical, socio-cultural, socio-political, sociolinguistic, and other extralinguistic factors were responsible for the process of Turkization of the Tocharians. (3) In addition, I also attempt to answer two important historical questions: how the Tocharian-Turkic language contact came about in the first place, and how long it lasted.² (4) Thus, I

¹ *Iatiku* Newsletter for the Foundation for Endangered Languages 2, 1996: 3. Krauss and some other researchers independently concluded that 50 percent of the languages that existed in 1992 will become extinct by the end of the twenty-first century (see Krauss 1992: 6; Crystal 2000: 19; cf. Simons / Lewis 2013). According to the estimates of the *Endangered Languages Project* (ELP), “over 40 percent of the world’s approximate 7,000 languages are at risk of disappearing.” <https://www.endangeredlanguages.com/about/> (accessed: 03/25/2023). This estimate shows that Krauss and others were not far from the truth.

² As S. G. Thomason remarks, there are “two crucial historical questions about language contact situations - how they come about in the first place, and how long they last.” And as she writes, even partial answers to these questions will be useful for orientation and predicting the future of current contact situations with some degree of confidence (Thomason 2001: 15). Thus, even if my answer to the questions above about Tocharian-Turkic language contacts is also partial for now, they will

make an attempt to answer all these questions, first factually from the perspective of Turkic historical linguistics and then theoretically from the perspective of sociolinguistics, as well as reconstruct the Turkization process of the Tocharians using all available evidence.³ (5) I try to reconstruct every stage of the language shift process of Tocharians in the flowchart below, which can be applied to almost all of the language shifts in the Eurasian steppe zone, especially the language shift phenomena in the Turkic language contacts.⁴

hopefully be useful, especially in terms of language shift and language death research and, in general, in terms of language contact research.

³ The reader may think that the use of the results of sociolinguistics in this study is very limited or weak. However, it should be noted that the vast majority of the available Tocharian or Old Turkic texts have Buddhist content and are therefore not suitable for drawing sociolinguistic conclusions. We do not have any other written sources from that period to help us make sociolinguistic inferences. For this reason, I carefully tried to draw general conclusions based on the results of historical linguistics and sociolinguistic research, as well as on some case studies, in order to be able to give an overall picture of the language shift process among Tocharians.

⁴ It can be said that this flowchart applies to approximately 75% of the language shift phenomena in the Turkic and Eurasian steppe zone language contacts. This is a flowchart that I use to describe the culture change-induced language shift cases in Turkic and Eurasian steppe zone language contacts. This is the most common type and a kind of modeling as well as typologizing of the diachronic language shifts of the socially, politically, and culturally non-dominant people in the Eurasian steppe zone (i.e., *substrate shift*). This kind of typology facilitates our ability to observe, categorize, and describe the common features, differences, or regularities of the culture change-induced language shift phenomena in the Eurasian steppe zone. It also helps to draw generalizable theoretical and methodical conclusions based on them. There is also a less common type (ca. 25%) that covers the language shifts of the dominant languages (i.e., *superstrate shift*). I cover both language shift phenomena in detail in a monograph in preparation, entitled “*Language shift phenomena in Turkic language contacts. A diachronic investigation.*” It will be a study that collects and tries to typologize the language shift phenomena in Turkic and Eurasian steppe zone language contact areas in the past. However, this general scheme (i.e., the flowchart), applied specifically for the Eurasian steppe zone (especially for the language contact phenomena of the Turkic and other Altaic peoples), may also be used in other similar language shift phenomena with case-specific additions or deletions. I used this flowchart here for the language shift process for the Tocharians. But the same flowchart can also be seen in the case of the Hungarian Szekelys of Proto-Turkic origin, who, together with the Huns, first migrated to the North Caucasus in the fourth century and then to the Balkans in the fifth century. In the eleventh century, they converted to Christianity and changed their culture. As a result, they shifted to the Hungarian language but have kept their ethnic identity. In the cases of both the Tocharians and the Szekelys, almost the same series of events took place at almost the same time. That is, the Tocharians started (eleventh century) to convert to Islam due to the Karakhanid Turks and shifted (twelfth–thirteenth

1. *event₁* → 2. *event₂* → 3. *preparatory event⁵* → 4. (trigger event)⁶ *religious conversion or faith change* → 5. *cultural change* → 6. *social change* → 7. *loss of cultural prestige* → 8. *loss of linguistic prestige* → 9. *bilingualism* → 10. *language loss* → 11. *language shift* → 12. *language death*.

With the help of this flowchart, I try to give a general description, diachronic (backward) predictions, and, where possible, a causal explanation for the phenomenon at issue.

It should also be noted that while a significant part of the Tocharians became Turkicized, another part became Iranianized, and another part became Sinicized. However, their Iranianization and Sinicization processes will be discussed in a separate study.

Coming back to the above-mentioned questions, it is not an easy task at all to give accurate answers to them since the Tocharian-Turkic interethnic or linguistic contacts still have many unsolved problems and unknown aspects. In addition, historical, philological, or linguistic materials are also very limited on this issue. However, theoretical answers based on the results of sociolinguistics and historical linguistics, as well as factual data of a philological nature, might help us to clarify this question to some degree.

Before we go into details of the process of the language shift of the Tocharians, however, it is

centuries) to the Karakhanid Turkic language in the west Tocharian language area and to the Old Uyghur language (thirteenth c.) in the east Tocharian language area, while the Szekely Turks converted (eleventh c.) to Christianity due to the Hungarians and shifted to the Hungarian language (twelfth–thirteenth c.); see Aydemir 2023: 25, 36.

⁵ This is the “preparatory event” for the “trigger event.” There is usually one preparatory event in the case of Turkic or Eurasian steppe zone language shifts, but two events can also be seen in some cases. The preparatory event refers mostly to the occupation, invasion, annexation, or conquest of a particular area or region in the Eurasian steppe zone, but also to joining a community through immigration in some cases. In the case of Tocharian language shift or language death, there is actually only one preparatory event. In order to be able to see antecedents as well, I also included the former events (i.e., *event₁* → *event₂*) into the flowchart, although they were not preparatory events in the strict sense. They may be important information for researchers studying language shift or language death since, in this way, the whole process can be observed and compared with other similar cases too.

⁶ The “trigger event” refers in this modeling to the main reason initiating the chain of events leading eventually to a language shift or language death.

worth giving a very short summary of how, where, and when the Tocharians came into contact with Turkic peoples at all. Namely, knowledge of the historical background is essential to make diachronic predictions or extrapolate general and case-specific linguistic conclusions about the contact situations that arose in the distant past. For this, however, we first need to make a periodization with a very brief description. I consider this important because a periodization of Tocharian-Turkic interethnic and linguistic contacts has never been done before. Namely, until now, we didn't even know when and where these relationships started at all. Until now, we have only been talking about a period of relations that started intensively in the second half of the ninth century but whose end is unclear or controversial. Such a periodization will also help to better understand the spatial and temporal dimensions of Tocharian-Turkic relations. Without a periodization, it is also not possible to accurately determine the chronology of phonological, morphological, and other structural features or lexical borrowings of Tocharian origin in Turkic, and this is also true in reverse. Such a periodization would also help us better understand the prehistory and linguistic history of both the Tocharians and the Turks.

Thus, based on the archaeological, historical, philological, and linguistic data and as a working hypothesis, the Tocharian-Turkic interethnic and linguistic contacts can tentatively be divided into three major stages:

(1) TWENTY-EIGHTH–THIRD CENTURIES BCE

This is the first period of contact between Proto-Tocharians and (Pre-)Proto-Turks. Its beginnings fall into the Afanasievo culture (ca. 3200–2500 BCE)⁷ when the first settlements of this culture appeared on

⁷ For the chronology, see Trautmann et al. 2023: 1.

the Altai.⁸ The Afanasievo culture is associated with the Tocharians who later arose in the Tarim Basin.⁹ The continuous growth of archaeological evidence from the region, however, may necessitate reconsideration or refinement of this tentative starting date. The first contacts with Turkic may have started sporadically in the north of the Mongolian Altai region. Namely, the results of my ethnotoponymic research, independently of other hypotheses, suggest that the Proto-Tocharians first expanded from the valleys of today's Altai Krai to the Mongolian Altai region, then to the Gobi Altai, and then to the central and southeastern Mongolian regions up to the Sükhbaatar Province.¹⁰ Therefore, we can say with certainty that there was linguistic and ethnic contact in these regions. Here are just some of the borrowings from this first period:¹¹

8 As for the start date for Afanasievo's arrival in the Altai Mountains, based on recent radiocarbon analyses of burial contexts, the Altai Afanasievo "mortuary sites" are dated to the thirty-first to twenty-ninth centuries BCE. (Poliakov et al. 2019: 243, 254, 260; Honeychurch et al. 2021: 4; see also Mallory 2015: 37; Anthony / Ringe 2015: 207, 211; Ning et al. 2019: 2529). Taylor and colleagues provide additional radiocarbon dates of burials during the first half of the third millennium BCE in western Mongolia (Taylor et al. 2019: 9–10; Honeychurch et al. 2021: 7). The radiocarbon (¹⁴C) dating for the Altai settlements, however, falls in the chronological range of the twenty-ninth–twenty-eighth centuries BCE (Poliakov et al. 2019: 254, 26; see also Anthony 2013: 10). The latest research suggests, based on the burials, that the central Mongolian migration occurred relatively early in the Afanasievo period and that the Afanasievo development was not simply a migration but was also significant and formative in terms of interaction with indigenous West Siberian, Altaic, and Minusinsk groups (Honeychurch et al. 2021: 11, 16). Based on all this, we can tentatively suppose that the relations of the Proto-Tocharians, who were representatives of the Afanasievo culture, with the (Pre-)Proto-Turks might already have started sporadically sometime in the first half of the third millennium. Even if the starting date is not certain for now, based primarily on archaeological results, it seems highly probable that Proto-Tocharians and (Pre-)Proto-Turks could have already been in contact in western, southern, and south-central Mongolia in the second half of the third millennium BCE.

9 Mallory / Mair 2000: 315–316; Klejn 2000: 180; Anthony 2007: 264–265; Anthony 2013: 10–11; Anthony / Ringe 2015: 208; Mallory 2015: 45; Kroonen et al. 2018: 7; Ning et al. 2019: 2526, 2530; Peyrot 2019: 76, 108; cf. Bjørn 2022: 6, 19.

10 I discuss this issue and other Tocharian ethnotoponyms from their Pontic-Caspian homeland in detail in my upcoming article titled "A linguistic contribution to the prehistoric homeland and historical geography of the Tocharians." Mallory thinks "there is no evidence for an Afanasievo migration south through the Jungghar Basin toward the land of the historical Tocharians" (Mallory 2015: 49; cf. Ning et al. 2019: 2530; Peyrot 2019: 75, 113).

11 I will extensively examine the borrowings of this layer in another study. However, it is highly probable that these lexical correspondences belong to this first layer, if my matchings are not wrong. The examination of Tocharian loanwords in Turkic

1. OTu. *kud-* ‘to pour’¹² (< PTu./PPTu. **ku-d-*; cf. TochA/TochB *ku-* ‘pour’ < PTo. **käu-*;¹³ semantically cf. OTu. *tök-* ‘id.’).
2. OTu. *teg-* ‘to reach (a place); to touch’ (< PTu./PPTu. **teg-* ‘reach (a place); touch; beg / ask (for)’); cf. TochB *täk-* / *tek-* ‘touch’;¹⁴ cf. OTu. *tegin-* ‘beg / ask (for)’ < **teg-(i)n-* PTu./PPTu. **teg-*.
3. PTu./PPTu. **teg-* ~ **tek-* ‘turn, rotate, twist, circle’¹⁵ (← ? SL¹⁶ **teg-* ~ **tek-* / **tēg-* ~ **tēk-*). For the possible PIE root **tek-*, see TochB *cake* ‘river’ < PTo. **cäke*.¹⁷
4. OUyg. *yéz* [jez] ‘copper’ (cf. SSTu. *yes*¹⁸ ‘id.’) < late PTu. **yéz* ~ **yēs* < PTu. **yēs* ← SL

or of Turkic ones in Tocharian as external reference points may help shed some light on some points of the historical phonology and on the absolute chronology of prehistoric sound changes in Tocharian and Turkic, which are actually based on inferential argumentations and relative chronologies (for Tocharian, see Kim 1999).

¹² The *-(X)d-* is a medial suffix. Its nondominant connecting vowel *X* follows fourfold high harmony (i.e., *i, i, u, ü*) and falls out when the base ends with a vowel. Initially, the word *kud-* might have belonged to the vocabulary of metallurgy.

¹³ The PTu./PPTu. **ku-* would normally go back to a form **ku-* in the source language (SL), but it may also go to a PTo. **käu-* ‘pour’ through sound substitution (i.e., PTu./PPTu. **-u* ← ? PTo **-äu*, for TochA/TochB *ku-* and PTo. **käu-*, see Adams 2013: 191).

¹⁴ TochB *täk-* / *tek-* ‘touch’ < PTo. *täk-* < PIE **dēg-* (Adams 2013: 305); cf. also de Vaan’s **t(e)h₂g-* that Adams quotes (de Vaan 2008: 606–607; Adams 2013: 306). The */e/* in Old and Proto-Turkic is an open-mid-front unrounded vowel [ɛ].

¹⁵ These two intransitive roots might have belonged to the vocabulary of “wheel,” though the word itself for “wheel” seems to be a Proto-Turkic derivation from the root **teg-* ‘rotate, etc.’ (PTu. **tegrek* ‘wheel’ < **teg-re-k* > OTu. *tegrek* ‘rim’). The following words in Old Turkic that were etymologically and morphologically opaque or misanalyzed are all derivations of these two verbal roots: OTu. *tegrek* (< **teg-re-k*) ‘rim (of a well)’, *tegirmen* (< **teg-(I)r-men*) ‘mill’, *tegzin-* (< **teg-(i)z-(i)n-*) ‘to revolve, rotate; travel about’; *tegzinč* (< **teg-(i)z-(i)nč*) ‘scroll etc.’; *tegzig* (< **teg-(i)z-(i)g*) ‘roaming’; *tegzim* (< **teg-(i)z-(i)m*) ‘tampon, wick’; *tegrigle-* (< **teg-(i)r-(i)g+le-*) ‘to assemble’; Hun. *teker-* ‘to roll, wind round, twist, rotate, etc.’ (← WOTu. **teker-* < **tek-er-* > MTu. **tek-er-(e)le-* > Tu. *tekerle-* ‘to rotate’ > *tekerle-k* > Tu. *tekerlek* ‘wheel’). The CTu. *teker* ‘wheel,’ however, may be a back-formation from the deverbal word form *tekerlek* ‘wheel’ because there is a denominal suffix *+lek* / *+lak* in Turkic (i.e., *tekerlek* > *teker*).

¹⁶ Or from “the language of Afanasievo”? For the hypothetical “language of Afanasievo,” see Björn 2022: 3, 5; cf. also Kroonen et al. 2018: 7; Peyrot 2019: 75–76.

¹⁷ Adams 2013: 267.

¹⁸ The *-s* in *yes* instead of *-z* may be due to Mongolian substrate, superstrate, or adstrate influence in phonology, but it can also go back to the form **yēsē* / **yēsā* (or **yēse* / **yēsa*) in the source language.

- **yěsē*/**yěsā*? (or **yése*/**yěsā*?); cf. TochB *yasa* ‘gold’, TochA *wäs* (< PTo. **wjäsā*).¹⁹
5. OTu. *kū* ~ *kü* ‘rumour; fame, reputation’ (PTu. **kū* ← late PTo.); cf. TochA *-klyu* in *ñom-klyu* ‘name [and] renown’²⁰ = OTu. (eighth century) *at kū* ‘id.’.
 6. (Siberian) Jakut-Turkic *kir*- < PTu./PPTu. **ker*- ‘to cut, to hack (up); to notch; metaphorically to bite, gnaw’ ← SL²¹ **ker*- / *(*s*)*ker*-; cf. PIE *(*s*)*ker*- ‘to cut’.
 7. TochB *ep*(-)/ ‘(rude) dwelling(?)’ (← PTu. **ēb* ~ **heb* ‘dwelling (place); tent; house’²² > OTu. *ēw* ~ *ew*; WOTu. **hew* > Khalaj-Turkic *hev* ‘id.’).

Since we do not yet have solid linguistic criteria, and sociolinguistic information about this period is lacking, it is not possible for now to safely decide which group introduced this lexical interference into the PTu./PPTu. or PTo./PPTo. Considering that the verb forms are more difficult to borrow from typologically different languages than the nouns and the non-basic vocabulary, and that verb borrowing presupposes a certain degree of bilingualism, the questions arise as to (1) who was bilingual, the Tocharians or the Turks, and (2) when and where were they bilingual? Another question arises at this point: Why do we see verb borrowings from Tocharian at all instead of non-basic vocabulary in Turkic, even though the verb categories of both languages are typologically quite different? The discussion of these and similar cardinal questions, however, is not the topic of this article. This period, together with other linguistic data, will be covered in another article.

I suggest that linguistic contacts during the first period probably occurred mainly in the western, southern, and south-central regions of today’s Mongolia and continued up to the beginning of the third century BCE. That is, according to Enoki et al., up to the beginning of the third century BCE (i.e., ca. 204–

¹⁹ Adams 2013: 525; for TochB *yasa*, see also TochB *yasna* ‘treasure chamber, treasury,’ whose final *-na* is not clear (see Adams 2013: 526). It might be a composition of TochB *yasa* + Iranian *(*χ*)*āna* ‘treasure house’ > TochB *yasna* ‘treasure chamber, treasury’ (see Persian *χāne* خانه ‘house; place’, Sogdian *xānā*, etc.).

²⁰ Carling / Pinault / Winter 2009: 153, 228; cf. TochA *klaw*- ~ *klāw*- ‘to name’ (Poucha 1955: 94), TochB *klāwi* ‘fame’ (Adams 2013: 240).

²¹ From “the language of Afanasievo?”; cf. n. 16 above.

²² Cf. Adams 2013: 93–94.

200 BCE), the Yuezhi²³ “dominated the greater part of Mongolia” and “pressed the Huns (Xiongnu) from the west.” They “were seeking to control the greater part of the Mongolian plain.”²⁴ According to S. Wada, the Yuezhi “realm included the north-western Mongolian plain and the upper waters of the Yellow River.”²⁵ In 176 BCE, when the Yuezhi (i.e., the ruling class of the Yuezhi confederation who were speaking the TochA language)²⁶ were defeated by Huns, the Yuezhi controlled more than twenty-six countries in the neighborhood.²⁷

All this means that up to the beginning of the third century BCE, Yuezhi—that is, the TochA-speaking group—could have had political, cultural, and linguistic prestige and impact on the subjugated countries in the neighborhood as well as on the Turkic and Chinese languages. The borrowings above, as relics of mutual lexical interference between Tocharian and Turkic from this period, clearly indicate strong linguistic contact and some degree of bilingualism. However, the issue of structural interference is a more difficult matter and is not the subject of this article.²⁸ I will return to the question of structural interference in a separate study examining the linguistic relationships and outputs of the first period of Tocharian-Turkic language contact. However, it can be said in advance that the Turkic structural influence assumed on the Tocharian languages by some scholars²⁹ could have been from this first period and not later, since in later periods there was no language contact situation

23 For the Yuezhi as TochA speakers, see Aydemir 2019: 274.

24 Enoki et al. 1996: 166, 169.

25 Wada 1939: 236–237, Wada 1942: 278; these works in Japanese by Wada are quoted by Enoki et al. 1996: 170.

26 Aydemir 2019: 274.

27 Enoki et al. 1996: 169. For a detailed history of Yuezhi, see Benjamin 2007.

28 For example, the question arises whether the loss of final vowels in Proto-Turkic is an influence of Tocharian A interference (or vice versa?) since the same phenomenon also took place in TochA. This phenomenon affected a significant part of the Proto-Turkic lexicon, if not all of it; e.g., OTu. *bod* ‘height, stature (of a man); clan, tribe’ < PTu. **bodu* (cf. OTu. *bodun* ‘tribes; people’ < **bodu+n*); CTu. *sor* ~ *sora* ‘ask’ < PTu. **sora*; *sag* ‘to milk (an animal)’ < PTu. **saga* = Mo. *saga* ‘id.’; OTu. *tōn* ‘garment, clothing’ < PTu. **tonā* ~ **tona* ← Khot. *thona* / *thonā* (~ *thauna*) ‘cloth’ (for the Khotanese forms, see Bailey 1979: 149b). According to Adams, “Early too was the loss of all final vowels” in Tocharian A; cf. TochA *kaṃ* (TB *kene*) ‘melody, tune,’ TochA *oñkalām* (TochB *oñkolmo*) ‘elephant’ (Adams 1988: 27).

29 Schaefer 2010.

where the Turkic language could have exerted such a structural influence due to a sub-, ad-, or superstratum effect on the Tocharian languages.³⁰

(2) SECOND CENTURY BCE–SIXTH CENTURY CE

This is the second period of contact between Proto-Tocharians and Proto-Turks. Language contact situations in the early phase of this period were probably not so intense and long-standing. Since this early stage consisted of casual contact situations, structural interference is unlikely. Lexical interference,

³⁰ According to Christiane Schaefer, a closer look at Tocharian morphology and syntax reveals Turkic influence. Namely, Tocharian (A/B) “developed a two-storey case system, with so-called secondary cases inflecting agglutinatively, that is to say, in a manner typical for Turkic but not for Indo-European languages.” Schaefer considers this feature as a Turkic substratum influence that could have taken place so that the “speakers of the dominated code, Old Turkic, inserted (“imposed”) a Turkic pattern into the dominating code, Tocharian,...” Based on this feature, she supposes further that another striking feature of Tocharian, namely the extensive use of converb constructions as a clause-combining strategy (just like in Turkic), might be explained through this “imposition” and the possible substratum influence of Turkic. She also remarks that the functioning as converbs of “absolutives” (ablatives of verbal abstracts) and “middle participles” (ending in Tocharian A *-māṃ*, Tocharian B *-(e)mane*) as a “deviating” feature in both the Tocharian varieties is typical for converbs in the Asian languages and especially in the Turkic. Based on these features, Schaefer assumes that the bilingual “Old Turkic” speakers transferred certain syntactic patterns and features of their own language through substrate influence into the prestigious one, Tocharian, using Tocharian morphology. She states that such an “impact on the morphosyntactic system of a code presupposes sufficiently intense and close language contact, and it implies a considerable number of bi- or multilingual speakers. When and where that happened is unclear.” (Schaefer 2010: 441–445). Similarly, Pentti Aalto draws attention to binominal and biverbal (i.e., bicoordinative) structures in Tocharian as possible influences of “Proto-Turkic sub- or adstratum”: e.g., TA *ārtantrā pālantrā* ‘(they) eulogize [and] praise’ (cf. OTu. *ög- küle-* and *ög- alka-* ‘to eulogize [and] praise’; TA *añumāski weyem* ‘wonderful [and] amazing’ (cf. OTu. *tañlančig muñadinčig* ‘wonderful [and] amazing’, etc.). He also states that “like the Tokharian pairs, the Turkic and Mongolian expressions usually inflect only the second component.” He states as a conclusion that “the Tokharian binomials are clearly to be classed among the non-Indo-European elements of this language. The obvious similarity between them and the compound expressions of the Altaic languages perhaps suggests that they are originally due to the influence of a Proto-Turkic sub- or adstratum.” (Aalto 1964: 69–78; for the opposite opinion, see Pinault 1998: 360). According to Georges-Jean Pinault, Tocharian terminology concerning the four cardinal points and the seasons of the year is similar to the system of the Turkic peoples but very different from the Indian system of six seasons. He also remarks that the names of pre-Buddhist deities in Tocharian are similar to those in Turkic (Pinault 1998: 358–368). These structural and semantic similarities between Tocharian and Turkic that Pinault draws attention to must belong to this first period as well, since language contact situations in the second period were not so intense and long-standing and would not enable this kind of similarity to emerge.

expected in casual contact during this period, is also generally very difficult to identify for now. I tentatively mark the second century BCE as the start of this period because the Huns defeated and drove out the ruling class and the greater part of the Yuezhi (i.e., Tocharian speakers) from Gansu and the Tarim Basin in 176 CE and then controlled the Tarim Basin at various intervals. Note that Tocharian A and Tocharian B speakers were living together in the Tarim Basin, while the Huns consisted mainly of Turkic and Mongolic tribes.³¹ I have yet to find linguistic traces, if any, of this early stage. In the late stage (fourth–sixth centuries CE) of this second period, contact took place in three different areas: in the eastern part of the Tarim Basin³² and in northern China³³ in the east, and in Bactria in the west. The contact in the eastern areas may have been casual. Since I have no definite data from this casual contact, I will leave it aside for now. As for the contact in Bactria, I think the situation is better. Namely, I think it is very likely that the Tocharian B *yolo* ‘bad, evil; ugly’³⁴ was borrowed from the Proto-Oguz Turkic (POGut.) in

31 For the historical background, see Mallory / Mair 2000: 90–91. For the identification of the Yuezhi as Tocharian speakers, see Aydemir 2019. For the map showing the historical geography of the Tocharian B speakers in the Tarim Basin, see Aydemir 2013: 92.

32 I.e., in the time of the Northern Liang Dynasty (fourth–fifth c. CE) established by the Huns (Xiongnu) around Kocho (Kara-Khoja), where the Tocharian A and Tocharian B groups lived. Based on some Proto-Turkic onomastic data in a Chinese document from 422 found in a grave near Kocho (Gaochang / Karahoja), the late Professor János Harmatta, a renowned Hungarian Iranist and Altaist, suggested that “the Xiongnu living around Kocho spoke Turkic around 422” (Harmatta 1986: xvii). Based on this fact, casual contacts between Proto-Turkic and Tocharians (A/B) may be expected.

33 According to the Weishu, a Chinese record (sixth century), in 403 CE, a chieftain of the Yuezhi (i.e., Tocharian) tribe surrendered to Tuoba-Wei, a dynasty of Turkic-Mongolic origin. From then on, Yuezhi was a noble clan among the Tuoba, and men of that tribe were prominent up to and through the Tang period (618–907). In Tuoba times, they were distinguished from other noble clans as being of western origin (Pulleyblank 1966: 18, note 4). It is clear that these were descendants of the Lesser Yuezhi (i.e., Tocharian speakers).

34 O. Hansen and M. Peyrot are quite right that this word is originally of Turkic origin and associated with the Turkic *yawlak* ‘evil’ (Hansen 1940: 162; Peyrot 2016). D. Adams thinks, however, that the TB *yolo* is of Tocharian origin and has been borrowed into Khotanese as *yola-* (Adams 2000: 556). Unlike Hansen and Adams, Peyrot thinks that it is “much more attractive to assume that *yolo* was borrowed from Khotanese *yola-*,” since Peyrot could not explain the disappearance of the final *-k* in the *yawlak* (Peyrot 2016: 333). However, etymological explanations concerning the related Turkic derivatives based on an alleged verb base **yav-* quoted by Peyrot from recent literature, are unfortunately all misanalyses. For the etymological

Bactria in the last phase of this period (fourth–sixth centuries), when Bactria (and, in my opinion, also the descendants of the Yuezhi/Kushans there)³⁵ was under the rule of the Huns, who were of Proto-Ogur Turkic origin according to French historian Étienne de La Vaissière.³⁶ Thus, the TochB *yolo*, based on its phonetic form, may have been borrowed first from the Proto-Ogur Turkic into the language of

article, which correctly examines *yawlak* and all other related derivations in Turkic based on the attested noun base *yav*, see Topuz 2017: 172–173.

35 The fact that the Yuezhi and Tocharian ethnotoponyms (i.e., *Arčī* = TochA and *Tokarak, Tukarak, Tugrak*, etc. = TochB) are found exactly where the historical sources refer to the Yuezhi and Tocharians (i.e., in present-day Afghanistan) and where the Kushan Empire was established is also clear-cut evidence that in the Kushan Empire there were both the TochA and TochB groups. Namely, Yuezhi (i.e., *Arčī*) seem to have settled in today's northern Afghanistan and Tocharians (i.e., *Tokarak, Tukarak, Tugrak*) in southern Afghanistan (for their historical geography in Afghanistan, see Aydemir 2019: 280–281, Maps 1 and 2). Here the question arises: if the Yuezhi or Kushanians were Tocharians, then why are there no written language records in their original language, and why were the linguistic remains (stone/wall/seal inscriptions, coin legends) of the Kushans not written in the Yuezhi, that is, in the Tocharian language, but in the Bactrian language in Greek script? I think one of the reasons may have been the phenomenon of *overt prestige*. Because of the overt prestige of the Bactrian language as a written and spoken code, they seem to have used the Bactrian language as the *prestige variety*. Thus, their own language may have had a *covert prestige*. The same is true (1) for various Hunnic tribes that migrated from the Altai to Bactria around 350–370, for whom the Bactrian language was also the prestige variety. That is why there is not any linguistic material left from the original (i.e., Yuezhi) language of the Kushanians or from the Bactrian Huns. The same phenomenon can be observed in the cases of Old Turkic or other Altaic people as well. For instance, (2) the Sogdian language and script had overt prestige for the East Old Turks (sixth–seventh c.), who used them as the official language and a writing system for administrative purposes, and the Old Mongolic language in Brahmi script for religious (i.e., Buddhist) purposes. (3) The West Old Turks, that is, the ruling class of Ogur Turkic origin of the First Bulgarian Empire (seventh–eleventh c.), used the Greek language and writing system in their inscriptions as the prestige variety. Thus, the Greek language had overt prestige for the Ogur (i.e., Bulgar) Turks. (4) The Chinese language and Chinese writing system had overt prestige for the ruling class of Turkic-Mongolic origin of the Tuoba-Wei Dynasty (386–535) in northern China. (5) Persian was the official language of the Seljuk Turks (eleventh–thirteenth c.), who used, however, Arabic for religious purposes. Precisely for this reason, there is not a single Turkish work left from the Seljuk Turks. (6) The ruling class of Mongolic origin of the Golden Horde (fourteenth–sixteenth c.) used the Kipchak Turkic language as well as Uyghur Turkic and Arabic alphabets because of their Turkic subjects. The same might also have happened in the case of the Yuezhi, who, when they conquered Bactria, used the Bactrian language in Greek script. That is why there is not a single work left in the original language of the Kushanians (i.e., Yuezhi).

36 La Vaissière 2003: 121–129. Proto-Turkic had two big dialects. One of them was the Proto-Ogur Turkic (i.e., *r*-Turkic), and the other was the Proto-Common Turkic (i.e., *z*-Turkic); cf. the ethnonyms *Ogur* vs. *Oguz*.

the Tocharians (A/B), the descendants of the Yuezhi in Bactria, and then to the TochB in the Tarim Basin: i.e., OTu. *yawlak* [jawlak] (~ [jaβlak]), *yawlāk* [jawla:k],³⁷ *yablak* [jablak] < PTu./POgTu. **yablak*³⁸ > POgTu. **yawlag* > **yawlay* > **yawlaw* > **yaŋlaŋ* (~ **yāŋlāŋ*) → Yuezhi **yolo* > TochB *yolo*; cf. Khot. *yola*- ‘falsehood’.³⁹

The following name of the Hunnic king in Bactria, whose structure and meaning have not been fully clarified until now, clearly shows that the well-known Ogur Turkic sound change (**-k* > **-g* > **-ɣ* > **-w* > *-ø*)⁴⁰ in the syllable-final position (contrary to what we know so far) actually took place in the ruling class of the Bactrian Huns (i.e., Proto-Ogur Turks) and had reached its last point, or was already over, in the fifth century or sometime before. This sound change may have started at the latest in the fourth century, if not earlier: i.e., Bact. *ολαργο* /*ulargo* or *olargo*/ (< Bact. **Ular+g*⁴¹ ← POgTu. **Ular* < **Uŋlar* / **Uwlar* < **Owlar* < POgTu. **Oylar* < **Oglar* < **Oguler* < PTu. **ogul* + *er*; cf. Kzk. *Uylar+* in *Урларбай*

37 The long vowel /ā/ (eleventh c.) in the second syllable is a secondary development and surely a dialect feature of the Karakhanid Turkic and can surely be out of consideration in the case of TB *yolo* or Khot. *yola*-. The secondary vowel length, as a dialect feature in the ultimate closed syllable of many polysyllabic words in Karakhanid Turkic, is probably an Iranian (Persian or Sogdian?) substrate influence.

38 The Turkic word is a derivation of the Proto-Turkic noun base **yab* ‘evil’, which can be seen in the Common Turkic (= CTu.) as *yaw*, *yav* today, i.e., OTu. *yawlak* < OTu. *yablak* < PTu. **yablak* < PTu. **yab+la-k* < PTu. **yab* ‘evil’ > CTu. *yaw*, *yav*). Because Bailey misanalyzed the OTu. *yawlak*, he thinks it derives from a verb stem **yab*- borrowed, in his opinion, from Saka *dab*- ‘to deceive’ (Bailey 1979: 343b). However, this is not plausible because the Turkic *yawlak* ~ *yablak* derived from the Proto-Turkic noun base **yab* ‘evil’, which is attested in the Common Turkic as *yaw*, *yav*.

39 For the Khotanese *yola*-, see Bailey 1979: 343. According to Adams, the “Tocharian word has been borrowed into Khotanese”; i.e., TochB *yolo* → Khot. *yola*- (Adams 2000: 556; cf. O. Hansen 1940: 162; Peyrot 2016).

40 For the sound change **-g* > **-ɣ* > **-w* > *-ø* in Oguric, see Agyagási 2019: 62–63; for its Old and Middle Turkic realization, see Aydemir 2021b: 87–88, note 50.

41 Rahman, Grenet, and Sims-Williams explain the *-g* as an Iranian adjective suffix, which seems to be correct. But their analysis as Turkic *Ogul+lar* ‘sons; *princes’ (+ Iranian adjective *-g*) of the name is surely implausible (Rahman / Grenet / Sims-Williams 2006: 128). The omicron <o> in the coda position is silent or a reduced vowel ə, phoneme, or allophone. For various opinions about the *-o* in the coda position, see Gershevitch 1966: 101; Harmatta 1969: 334; Morgenstierne 1970: 126; Sims-Williams 1984: 233–234.

|*Uglarbay*| < *Uglar+bay*, a male name; Tu. *Oğuler*, a rare male name).⁴² The following Bactrian borrowing of Turkic origin from the seventh century seems to also support the above statements:⁴³ Bact. *χοτολο* |*xotolo*| (← **hutlu* < **hutlu* < **hutluw* < POgTu. **k^hutluy* < POgTu./PTu. **kutlug* > OTu. *kutlug* ‘fortunate’) ~ Bact. *χοτολογο* |*xotologo*| (← POgTu. **k^hutluy* | **k^hutlug* ‘id.’). Chronologically, *χοτολο* may be a later borrowing, *χοτολογο* an earlier borrowing, or *χοτολογο* may be borrowed from the non-Oguric, Common Proto-Turkic **y*-dialect in Bactria.

In summary, it can be said as a working hypothesis that both TochB *yolo* ‘bad, evil; ugly’ and TochB *kärk*- ‘to hack up,’ discussed above, are probably of Proto-Ogur Turkic origin in Tocharian. If my working hypothesis turns out to be correct, then we can almost certainly state that a part of the Proto-Tocharians were in linguistic contact not only with the Common Proto-Turkic speakers but also with the Proto-Ogur Turkic speakers during the first and second periods of contact as well.

(3) SIXTH–SEVENTH AND NINTH–THIRTEENTH CENTURIES CE

The third and also the last period of Tocharian-Turkic language contacts, which we are going to examine as thoroughly as possible, starts with the sixth century, when the First Turkic Khaganate centered in the Mongolian steppe was established (552–630 CE). In this section, I first describe the historical background as briefly as possible and then attempt to determine the contact situations; how the Tocharian and Turkic people came into contact in the Tarim Basin at all; what happened to the Tocharians then; when, how, and why they disappeared; or when the Tocharian languages (A and B) died out. I will also attempt to determine the main factors responsible for the language shift of the Tocharians in the Tarim Basin and reconstruct them based on the above-mentioned flowchart. The

⁴² For a more detailed analysis of these data, see Aydemir 2021a: 450–453. The *ολαργο* |*ulargo*| has also the variant *ογλαργο* |*oglargo*|, which must be analyzed (see above) as PTu. **Oglar* (< **Oguler*) + Iranian -*g* (i.e., *Oglarg* or *Uglarg*). It is the name of another(?) Hunnic king from another Bactrian source (fifth c.; see Rahman / Grenet / Sims-Williams 2006: 128). It may be a borrowing, if its chronology is correct, from the non-Oguric, Common Proto-Turkic **y*-dialect in Bactria since, as I have already shown, Hunnic (i.e., Proto-Turkic) borrowings in the Bactrian language show both the PTu. **y*-[j] and *j*-[dʒ] dialect features. The *j*-dialect could have been the Oguric one (see Aydemir 2021a: 512–513). For more information about the Old Ogur Turkic **y*-[j] and *j*-[dʒ], see Róna-Tas / Berta 2011: 1088, 1090, 1093; Agyagási 2019: 43–55.

⁴³ Sims-Williams 2011: 22.

historical background is also worth describing briefly because it may serve as an analogy and help researchers make educated guesses about other language contact, language shift, or language death situations in the distant past, about which we have little or no idea. Since in this chapter I concentrate only on the process of language shift itself, its social context, and evidence of contact situations, I will talk less about the possible linguistic outputs of this process in Old Turkic, although they are at least as important as the language shift process itself. Among them, I will mention here only those that I consider to be certain or very possible. The linguistic outputs in Turkic should be examined in a separate study as they are beyond the scope of the present paper and have not yet been fully explored, whether in the Old Turkic, in the Old Uyghur, in modern Uyghur, or in its modern dialects. Much work remains to be done in this area.

This period is characterized by two phases: (1) The early phase (sixth–seventh centuries) of casual contact situations, when any structural borrowing from the Early Old Turkic is unlikely to occur in the Tocharian languages; (2) The phase (ninth–tenth centuries) of increasingly intense contact, bilingualism, language attrition, language loss, language shift, and language death (eleventh–thirteenth/fourteenth centuries), which were caused first by the mass immigration of the Uyghur people (840 CE) from the area of today's Mongolia and then by a profound cultural change due to the conversion to Islam from the eleventh century on, which led to a language shift first and, finally, a language death. After this introduction, let us take a brief look at the historical background to show how this contact situation came about.

HISTORICAL INTRODUCTION⁴⁴

According to our current knowledge, the first contacts between the Turkic and Tocharian peoples in the Tarim Basin began in the sixth century. In the middle of the sixth century, the First Turkic Khaganate was established (552–630 CE), which from the beginning was divided into two parts: an eastern and a western part (i.e., East Old Turkic and West Old Turkic). From then on, the cities of Beshbalik, Kocho, Karashahr, Kucha, and the entire Tarim Basin, that is, the areas inhabited by the Tocharians, came under the control of the Western Old Turks and remained under their control until

⁴⁴ For the historical background of this last period of Tocharian-Turkic language contacts, see also Aydemir 2009: 159–162.

the collapse of the First Turkic Khaganate (630 CE). Although we have no information, it can be assumed that the areas inhabited by the Tocharians were in tribute relations with the Old Turks. We also have no information on whether the areas inhabited by the Tocharians were only under the military control of the Western Old Turks or whether the Turks also settled these areas with various Turkic groups of various sizes. It is, however, highly possible that the Western Old Turks established military colonies in these areas for garrison duty and border protection.⁴⁵

After the collapse of the East Old Turks, the West Old Turks were only able to control the Tarim Basin until the early 640s. The Tocharian people in the Tarim Basin came under the administrative and military control of the Chinese first (640–790) and then of the Tibetans (790–866)⁴⁶ before coming under the rule of the Uyghurs in 866.⁴⁷ This important fact has never been taken into account in terms of Tocharian-Uyghur language contact. The political relations of the Western Old Turks with these areas, and thus with the Tocharians, lasted for about ninety years.

This relatively short time seems to have been a period of casual contact. Thus, structural

45 The *Yarkām* (**Yarkāñ*), a name of a place in a TochB text from the seventh century, may be a possible remnant of the Turkic presence in the territory from this period (cf. Adams 2000: 521). It can be seen as *Yarkand* today (< Tu. *Yarkand* < Tu. *yar* 'clif, cleft, precipice' + OTu. *kend* 'city; village; town' ← Sog. *knδ(h)* 'city'), the name of a city in the western part of the Tarim Basin. The TochB *Yarkām* (**Yarkāñ*) may refer to an Old Turkic form **Yarkan* ~ **Yarken* (< OTu. *yar* + *ken*; see OTu. *kend* ~ *ken* 'city; village; town' from the eleventh c.). Namely, the city of *Yarkend* was right on the southern border of the Western Turkic Empire between Kashgar and Hotan. Therefore, it seems highly probable that the Old Turks used this strategically located city, which they called **Yarken* ~ **Yarkan* or even dialectal **Yarkañ*, for garrison duty and border protection. This designation seems to have been borrowed by the TochB, since it was the western dialect of Tocharian. Based on all this, we can assume that this place name appeared after 552 (if not earlier) and was borrowed by the TochB in the second half of the sixth century.

46 Vásáry 1993: 94; Czeglédý 1984: 160; Bregel 2003: 19–20 (see maps 8 and 9). In the 790s, the Tibetans captured the cities of Kumul (Hami), Beshbalik, Turfan (Kocho), and Hotan in the eastern part of the Tarim Basin. In 803, the Uyghurs recaptured Turfan. The Tibetans then recaptured Turfan again. Turfan was recaptured in 850 by the Uyghurs, lost again for a while (c. 861–865) and finally retaken in 866 (Czeglédý 1984: 160; Bregel 2003: 20).

47 The Tarim Basin came fully under the dominion of the Uyghurs only after they finally defeated the Tibetans, who controlled that region, in 866. Therefore, Károly Czeglédý determined the founding date of the Turfan (Kocho) Uyghur Kingdom to be 866. This is important because intensive Tocharian-Uyghur language contacts could only have been started after this date and not before (Czeglédý 1984: 160).

borrowing is unlikely to have occurred. However, lexical interference from the West Old Turkic in the nominal domain of administration and politics, especially in the domain of Turkic political-military titulatures (i.e., TochB *yāpko*,⁴⁸ *čor*, etc.), seems to be possible.

During the Second Turkic Khaganate (682–744 CE), the territories in the Tarim Basin inhabited by Tocharians remained outside the borders of the khaganate. Thus, neither the Eastern nor the Western Old Turks had overlapping territory with the Tocharians in this period. Namely, as described above, the Tarim Basin came after 744 under the rule of the Chinese first and then of the Tibetans until 866.

From the middle of the eighth century on, the Old Turks were again in territorial and interethnic relations with the Tocharians in the Tarim Basin. During this time, some Old Turkic tribes continuously fled from the Mongolian steppe to the areas east and south of the Mountains of Heaven (Tenri Tagh, Tian Shan) in the Tarim Basin. First, between 750 and 753, after the collapse of the Second Turkic Khaganate, the Basmyl and Karluk Turks fled from the Uyghurs in the Mongolian steppe to the territory of Beshbalik in the northeastern part of the Tarim Basin. Between 744 and 840, the Uyghur Khaganate collapsed in the Mongolian steppe. Following that, some ninety years after driving the Basmyl and Karluk Turks into the Tarim Basin, the greater part of the Uyghurs fled en masse from the Kyrgyz to the northeastern parts (Jungharia, Beshbalik, Turfan Oasis) of the Tarim Basin as well. Soon after that, the Kocho (Turfan) Uyghur Kingdom, near modern Turfan in northeastern Xinjiang, was formed in the northeastern Tarim Basin in 866, which lasted until the first decade of the fourteenth century. Thus, the speakers of TochA and B came under the dominion of Uyghurs in 866.

The Uyghurs came under strong Tocharian influence from the middle of the tenth century on, when their ruling dynasty abandoned Manichaeism and converted to Buddhism. This created a very interesting situation because, while the Uyghurs were in a prestigious socio-political position, the Tocharians were in a prestigious religious-cultural position. However, this interesting prestige situation changed completely in favor of the Uyghurs later (see Event 2 below). This raises an important question,

48 See Pinault 2007: 350. TochB *yapko* ~ *yāpko* – if not a borrowing from Bactrian *αβγο* – may also have been borrowed from the West Old Turkic in this period (i.e., *yapko* ~ *yāpko* ← WOTu. *yabgu*). The political-military term *yabgu* is of Turkic origin and a derivation of the verb *yap* ‘to cover something, someone, or the retreat,’ i.e., *yap-gu* > *yapgu* > *yabgu* ‘guard, guardsman’ (see Aydemir 2021a: 502–5014).

which is discussed in detail below: to what extent and when do socio-political or religious-cultural prestige situations help or hinder a language shift?

As is clear from the brief historical overview above, the intense ethnic, linguistic, and cultural contacts between Tocharians and Turks or Uyghurs in this period only started from 866 on—that is, in the second half of the ninth century and not before. This fact should always be taken into account when evaluating Tocharian-Uyghur linguistic contact or the date of the death of the Tocharian languages. At this point, an important question arises: Can a people as large as the Tocharians or a language as widespread as the Tocharian language, extending throughout the entire Tarim Basin, suddenly disappear? (Note that the Tocharian language began to affect the language and culture of the Uyghurs in the middle of the tenth century.) If yes, then how? Was this a case of sudden language death or radical language death, or is it better classified as another type of language death? These questions will also be discussed in detail below.

The above review of historical background also reveals another important fact: The Tocharians in the Tarim Basin did not have intense and lasting linguistic contacts with the Eastern Old Turks (sixth–eighth centuries CE), but only with the Western Old Turks. Their contact with the Eastern Old Turks was casual and occurred over a relatively short period, about ninety years. After this historical background, we can begin to examine the processes that led to language shift and language death, according to the flowchart mentioned above.

1. EVENT 1⁴⁹

HISTORICAL FACTS PROVING THE EXISTENCE OF THE TOCHARIANS IN THE NINTH CENTURY

As described above, between 750 and 753 (after the collapse of the Second Turkic Khaganate in the Mongolian steppe in 744 CE), the Basmyl Turks fled from the Uyghurs, who occupied the Mongolian steppe, to the region of Beshbalik⁵⁰ in the northeastern part of the Tarim Basin, where the Tocharians and

⁴⁹ See n. 5 above.

⁵⁰ Vásáry 1993: 94.

TochB groups lived.⁵¹ We know nothing about the language contact between the Tocharians and Basmyl Turks. The Basmyls were both relatively few in number and certainly not in a socio-politically dominant position compared to the Tocharians. As a result, there was a Tocharian dominance in the Tarim Basin until 840, although they were subordinated to the Chinese first (640–790) and then the Tibetans (790–866) before they finally came under the dominance of the Uyghurs, first temporarily in 840 and then permanently in 866.⁵² In other words, there was no situation that would threaten the existence of the Tocharian languages until the middle of the ninth century. On the other hand, since the Tocharians were in a relatively prestigious position in this region both socio-politically, religiously, culturally, and linguistically, considering the similar situations in the Eurasian steppes, it can be assumed that the Basmyl Turks came under the cultural influence of the Tocharians by joining the tribal union of *Tokuz Eršin* ‘The Nine Ārsis’ (eighth century). Thus, the influence was surely in the direction of *Tocharian* → *Basmyl-Turkic*.

This situation continued until the Uyghurs fled en masse to this region in 840. This period (i.e., eighth–ninth centuries), therefore, contrary to popular belief, had no direct impact on the language shift of the Tocharians or the death of the Tocharian languages at all. In my opinion, and as detailed

⁵¹ For the Tocharian ethnotoponyms referring to the TochA and TochB groups in the Tarim Basin, see Aydemir 2013: 92 (for TochB); Aydemir 2019: 282 (for TochA).

⁵² The Old Turkic designation *Tokuz Eršin* ‘The Nine Ārsis’ – a tribal union of Tocharians – in the Old Turkic inscriptions (eighth c.) clearly refers to this TochA dominance in the Tarim Basin during this time; cf. eighth c. OTu. *Eršin* [erʃin] ‘Ārsis’ < OTu. *Erši* [erʃi] + OTu. plural -n ← *Ārsi* [arci], the well-known self-designation of the TochA speakers. See below also the other Tocharian tribal unions, *ctʂr twyrʾk* and “*yākiy tūyrak*” from the first half of the ninth century. ‘The Nine Ārsis’ actually refers to the members of the tribal union in question. These members, however, may have been the nine major cities in the Tarim Basin under the dominance of the ruling class of the TochA origin. Namely, a certain sentence in the Chinese records *Weishu* (102), *Beishi* (97), *Suishu* (83), *Zhoushu* (50), that is, ‘*The land of Argi* (焉耆) ... *There are nine major cities in the land* (焉耆國 ... 國內凡有大九城), refers clearly to the TochA dominance in the Tarim Basin from very ancient times until the middle of the ninth century. *Argi* (cf. *Argu* below), a variant of *Ārsi*, was the self-designation of the TochA speakers (see Aydemir 2020: 211–217); i.e., Modern Chinese *Yānqí* 焉耆 < EMC **ʔiangji* 焉耆 < LH **ʔangi* 焉耆 ← TochA **Argi* [argi] < PTo. **Arki* [arki] ‘white’ > **Arci* [arci] > **Arči* [arči] > TochA *Ārsi* (see Aydemir 2019: 262; Aydemir 2020: 211–217). On the other hand, *Yānqí* is the Chineseized form of the name *Argi* of an ancient Tocharian city known today as *Karashar* of Turkic origin. Because of this fact, Wang incorrectly identified the city of Argi in the sentence “The land of Argi (焉耆)” above with the city of Karashar (see Wang 1944: 83–85).

below, the Tocharian languages were still living languages in the ninth century and even later, and the Tocharians did not disappear either. Tocharian Buddhist literacy was also stable in the ninth and tenth centuries and later, as we will see below. The general view, therefore, that “at any rate, no one believes that the literary languages continued in use long after about 800 CE, and we have no cause for assuming that the spoken languages survived the death of the written forms for any length of time”⁵³ as well as that the Tocharian “manuscripts from the ninth century onward were copied by scribes that spoke other languages, for instance Old Uyghur,”⁵⁴ are not justified, as we will see below.

Namely, logical contradictions emerge at this point. As a matter of fact, the Uyghurs first came to the Tarim Basin, where the Tocharians lived, in 840, that is, in the middle of the ninth century, but their intense language contact with the Tocharians could have started only when they finally ended the Tibetan domination in the Tarim Basin and established the Kocho Uyghur Kingdom in 866. Before that, the Uyghurs did not have any linguistic contact with the Tocharians except for when they recaptured Turfan (Kocho) from the Tibetans in 803 for a very short time. Therefore, the following logical questions immediately arise in this regard: (1) If the Tocharian languages had already disappeared by around 800 and there were no Tocharian-speaking people anymore in the ninth century, from whom did the Uyghurs learn the TochA language so perfectly in the second half of the tenth century to translate these two fundamental works of the greatest and most fundamental Buddhist works in the Old Uyghur language, *Maitrisimit* and *Daśakarmapathāvadānamālā*? (2) Who wrote the TochA manuscripts dated by radiocarbon research to the tenth century if the TochA and TochB languages were already extinct? THT1068 (925–998 CE), THT1018 (938–997 CE), and THT1030 (985–1022 CE).⁵⁵ For, as we will see clearly below, TochA speakers (see below *Yākī* in *Yākī Tugrak*) surely still existed in the ninth century and, even in the tenth century, when these TochA texts were translated into Uyghur.

In addition, the view that the Tocharians and the Tocharian languages were already extinct in the ninth century overlooks the following two very important historical facts about the Tocharians as

53 Henning 1978: 216; see also V. Hansen 2012: 77; Wilkens 2016a: 205.

54 Peyrot 2008: 206. According to D. Ringe, TochA and TochB were spoken until approximately the tenth century CE (Anthony / Ringe 2015: 201).

55 For radiocarbon dating, see Tamai 2005: 7; cf. also Adams 2006: 386.

well: The names of two different tribal unions of the Tocharians from the first half of the ninth century, just before the arrival of the Uyghurs in 840, clearly prove that the Tocharians were present in the Tarim Basin at that time, although they were under the rule of the Tibetans. One of them is (1) the *ctṣ'r twyr'k* ‘the Four Tugrak (tribal union)’ in the Sogdian part of the Karabalgasun inscription (ca. 825), where the *Tugrak* (< *Tugur* + *-ak*) is an exonym for the Tocharians (i.e., *Tugrak*/*Tograk* ‘Tocharian’).⁵⁶ This certainly could have been a tribal union of the western Tocharians, that is, the TochB speakers in and around Kucha, and, as was usual on the steppe, it was subordinated to the *Yākī Tugrak* below, a larger tribal union, as its western branch. (2) The second one is the “*yākiy tūyrak*” in the Manichaean Hymn Book (Mahnāmāg), written in Middle Persian between 808 and 821.⁵⁷ As I have already shown recently, “*yākiy tūyrak*,” that is, *Yākī* [and] *Tugrak* is the name of a tribal union and means ‘Yākī and Tocharians.’ Specifically, *Yākī* (< *Yarki* ~ *Arki* ~ *Ārsī*) is one of the variations of the self-designation of the Tocharian speakers.⁵⁸ The designation *Yākī Tugrak* indicates that this tribal union consisted of two leading tribes,

⁵⁶ As Henning showed a long time ago (Henning 1938), it is beyond dispute that *Tugrak* denotes Tocharians. The *-ak* (i.e., *-k*) is the Sogdian adjective suffix. For more information about *Tugrak* (= TochB speakers), see Aydemir 2009, Aydemir 2014; Henning 1938: 550 ff. The designations (1) *ch'r twgryst'n* / *čahār tuyrestān* ‘The Country of the Four Tuyre’ in the Middle Persian in Manichaean script (Müller 1918: 577; Henning 1938: 551; see also Durkin-Meisterernst 2004: 330b) and (2) *tōrt kūsen uluš* ‘The Country of the Four Küsen (Kuča)’ in the Old Turkic *Maitrisimit* translated from Tocharian A as well as (3) the Sog. *ctṣ'r twyr'k* mentioned above are all the interlingual allonyms of the country of the TochB speakers. It is not known, however, to which territory “The Four Tugrak Country” refers. I think that all three designations roughly refer to the territory of today’s Aksu Prefecture, including Kucha in the east and Uchturpan in the northwest. I will discuss this issue in detail in another paper, as discussing it here would extend the scope of this paper. For the <twgry> (= *Tuyre*) in *twgry-st'n*, compare the OTu. <twqry> (= *Tuyre*) in *Maitrisimit* and *Daśakarmapathāvadānamālā*, translated from Tocharian A as well as in *Manichaica I* in Old Uyghur. The earlier reading *Toxri* of the OTu. <twqry> in the Turkological and Tocharian literature is not justified. The Sogdian exonym *Tuyre* for Tocharians goes back to the Sogdian adjective form <twyr'k> *Tuyrak*, i.e., OTu. *Tuyre* < Sog. **Tuyre* < *Tuyrak* < *Tugur* + *-k* < *Tugur* ‘Tocharian’ (Aydemir 2009: 162 ff.).

⁵⁷ For the “*yākiy tūyrak*,” see Müller 1913: 12; cf. *y'xyy* / *yāxē* and *twyrk* / *toyrak* ‘poplar’ (see Durkin-Meisterernst 2004: 330b), but the interpretation of the second component, *Tuyrak*, as Uyghur *toyrāq* ‘poplar’ (sic) is wrong. The Tocharian ethnonym *Tugrak* has nothing to do with the Uyghur *toyrāq*.

⁵⁸ For the relationship between the ethnonyms *Yākī*, *Yarki*, *Arki*, and *Ārsī* of Tocharian A origin, see Aydemir 2019. The comparatively primary form was actually **Arki* [arki]. The form *Yarki* with a palatal on-glide (i.e., *[iarki]) is a secondary but very archaic form (i.e., *Ārsī* [arci] << **Arki* [arki] ‘white’ > **Yarki* [iarki] > *Yerki* ~ *Yarkī*). I will deal with this problem in

that is, the *Yākī* (= TochA) and *Tugrak* (= TochB), and the leader of this tribal organization was the *Yākī*. This can also be seen from the fact that, in Eurasian steppe practice, the leader of such a two-member tribal union was always the first component. The name *Yākī Tugrak* seems to follow this steppe practice as well. Based on the names of these two tribal unions (i.e., *ctβ'r twγr'k* and *Yākī Tugrak*) from the ninth century, we can make the following inferences:

- a. The designation *ctβ'r twγr'k* 'The Four Tugraks' clearly proves that the TochB speakers (i.e., *Tugrak*) still existed in the first half of the ninth century, and the interaction of TochB speakers with the Uyghurs had not yet begun during this period. At the same time, this clearly proves that the Tocharians and Tocharian languages did not disappear in the eighth or ninth centuries.
- b. The designation *Yākī Tugrak*, that is, 'Ārsī and Tocharians,' also clearly proves that the TochA speakers still existed in the first half of the ninth century. The fact that the speakers of both TochA and TochB constituted a tribal organization indicates that they were at the summit of their power and that this organization was led by the TochA (*Yākī*) speakers. In other words, TochA was surely still a living language in the first half of the ninth century.⁵⁹
- c. The ethnonym *Yākī* indicates that, apart from the hitherto well-known TochA group and designation, *Ārsī*, there was also another TochA group with the name *Yākī* (< *Yarki* = *Yuezhi* 月氏).⁶⁰
- d. This group of *Yākī* might have spoken a different type of TochA dialect because, in the syllable-final position of the first syllable, the *-r* is syncopated, causing the preceding vowel to be lengthened (i.e., *Yākī* < *Yarki*). This might have been a dialect feature. I have also found forms of this ethnonym with *r*-deletion in Old Chinese sources as well as among the ethnotoponyms in the Tarim Basin.⁶¹ So this *r*-deletion does not seem to be a one-time occurrence. Interestingly, the same phenomenon can be observed in the standard Uyghur language as well. Although in the official Uyghur orthography the <r> is maintained, in the syllable-final position, the [r]

a separate study.

⁵⁹ For Tocharian A as a living language, see also Malzahn 2007b: 290 and note 48.

⁶⁰ On the designations *Yākī* = *Yarki* = *Yuezhi* (月氏) for the Tocharian A speakers, see Aydemir 2019.

⁶¹ For more information on this, see Aydemir 2019: 270–272.

optionally disappears from pronunciation in casually spoken language, optionally causing the preceding vowel to be lengthened, which in some cases has also come to be orthographic: *erte* > *ete* [ɛ:tɛ] ‘morrow’,⁶² <qorsaḡ> [q^ho:saq] ~ [q^hosaq] ‘belly’, <parče> [p^hɑ:tʃ^hɛ] ~ [p^hɑtʃ^hɛ] ‘piece’, <kördüm> [c^hø:dym] ‘I saw’. Since the standard Uyghur language is based on the Urumqi dialect, and this city belonged in the past to the linguistic area of the TochA and was under the dominance of *Yāki* (see “*yākiy tūyrak*”), i.e., *Ārki*, the question arises as to whether this *r*-deletion in the standard Uyghur is a pure coincidence or a substrate influence of the TochA dialect. My suspicion is that this phenomenon became widespread and optional because the Urumqi dialect became the standard Uyghur dialect.⁶³ However, this remains open to discussion and needs further research.

As is clear from the above, the undisputed historical facts regarding Tocharian history have escaped the attention of the researchers who suggest that the Tocharians and the Tocharian languages were already extinct in the eighth century. Thus, their views are unjustified.

In summary, the following facts concerning the existence of the Tocharians in the Tarim Basin in the eighth and ninth centuries should be emphasized:

- a. The designation *Tokuz Eršin* ‘The Nine Ārsis’—a tribal union of the TochA speakers—in the Old Turkic inscriptions (eighth century) clearly indicates TochA dominance in the Tarim Basin in the early eighth century.
- b. The Sogdian designation *ctβ’r twyr’k* ‘The Four Tugraks’—a tribal union of the TochB speakers—in the trilingual Karabalgasun inscription (ninth century) clearly proves that the TochB speakers (i.e., *Tugrak*) still existed in the first half of the ninth century. The Uyghurs built this stele around 825, when they were not yet in the Tarim Basin but still in the Mongolian steppe and had no linguistic contact with the Tocharians. This important fact seems to have escaped the attention of researchers who believe that the Tocharians and the Tocharian

⁶² For more information on this, see Hahn 1991: 77, 86–87.

⁶³ The phenomenon of *r*-deletion in standard Uyghur and Uyghur dialects has not yet been comparatively investigated.

languages were already extinct in the ninth century, and that the Uyghurs copied Tocharian manuscripts from the ninth century on.

- c. The designation *Yāki Tugrak* 'Yāki and Tugraks'—a tribal union of the TochA and B speakers—in the Middle Persian *Mahrnāmag*, the Manichaean Hymn Book (ca. 808–821) also clearly proves that the TochA (*Yāki*) and B (*Tugrak*) speakers still existed in the ninth century.

After all this, of course, the question arises: despite the historical facts above, why is it still the prevailing view that the Tocharian languages disappeared in the eighth century and there were no longer any Tocharian-speaking people in the ninth century? Schaefer explains why: "By the end of the eighth or ninth century CE, Tocharian seems to have ceased being a written code for the domains of religion, administration, and economy in the city-states of Kucha and Turfan, as only a few Tocharian manuscripts are attested after the ninth century." But Schaefer, unlike many other researchers, quickly and rightly adds: "That does not mean, however, that Tocharian also disappeared as a spoken code; it may well have been used as a means of oral communication far beyond that time."⁶⁴

So we still have to explain why, if the Tocharians apparently still existed in the ninth century, did the Tocharian as a writing code cease—or appear to cease—after the eighth century? This question is key to understanding what really happened to the Tocharians, but as far as I know, this question has never been asked before now because it is generally accepted that the Tocharians and the Tocharian languages were already extinct in the eighth century. In the following sections, I will attempt to address this cardinal question as briefly as possible.

I think there are three main reasons for the abandonment of Tocharian as a writing code: administrative, religious, and economic reasons. It starts with the Tocharians coming under the rule of the Tibetans in 790, followed by the Uyghurs in 840–866. Normally, in the Eurasian steppes, conquering people without an alphabet adopted the writing system in the conquered region, along with the writing culture, the literature, and the religion, if they had any. That is, they adapted to the place and culture they conquered in all respects and, in some cases, even shifted to the language of the ones they conquered. This happened, for example, (1) in the case of the ruling class of Ogur Turks of the First

⁶⁴ Schaefer 2010: 451.

Bulgarian Empire (seventh–eleventh centuries, *Turkic* → *Slavic*), (2) the ruling class of Turkic–Mongolic origin of the Tuoba-Wei Dynasty in northern China (386–535, *Turkic-Mongolic* → *Chinese*), (3) the Seljuk Turks in Anatolia (eleventh–thirteenth centuries, *Turkish* → *Persian*), (4) the ruling class of Mongolic origin of the Golden Horde (fourteenth–sixteenth centuries, *Mongolic* → *Turkic*), and (5) the Yuezhi (= *TochA* → *Bactrian*), i.e., the ruling class of the Kushans in Bactria (second centuries BCE–fourth centuries CE), etc. In other words, the conqueror adopted the language of the conquered and used that language as the language of overt prestige and its own language as the language of covert prestige. However, it did not happen in the case of Tocharian-Tibetan or Tocharian-Uyghur relations because both Tibetans and Uyghurs had their own writing systems and writing cultures. Therefore, neither the Tibetans nor the Uyghurs had to adopt the writing system and written culture of the Tocharian people they conquered, like the other steppe peoples given as examples above. For this reason, the Tocharian languages had no overt prestige but only covert prestige, both during the Tibetan (790–866) and Uyghur rules (from 866 onward).

Thus, I think that the decline of Tocharian culture and languages actually started when the Tocharians came under Tibetan rule in 790 CE. As a result of this and because of the overt prestige of the Tibetan language, Tocharian ceased to be used as a written code for the domains of religion, administration, and economy after about 790, since (1) all economic sources, financial support systems, and management of Buddhist institutions (i.e., monasteries, temples, etc.) of Tocharians could have passed into the hands of Tibetans, and, thus, (2) in all these domains, the Tocharian language and Brahmi script must certainly have been replaced by the Tibetan language and script. That is, Tocharian dominance in the Tarim Basin suddenly ceased to exist in 790. As a result of that, Tocharians became invisible in the Tarim Basin, as if they had also suddenly ceased to exist. This significant historical event has escaped the attention of Tocharian research until now. Precisely because of this, it is generally accepted in Tocharian research that Tocharians and the Tocharian languages had disappeared already at about 800. However, this is definitely not the case. At this point, the question arises again: Can a people as large and spread over a wide geography as the Tocharians, who produced Buddhist literature in the eighth century, suddenly disappear? If yes, then how? Was this then a case of sudden language death or radical language death? Certainly not. That is a completely unjustified claim. This is actually just a “shadow effect,” a term that I introduced recently to describe similar events or phenomena in the

Eurasian steppe zone.⁶⁵ Tocharians were always there, even after the eighth and ninth centuries, but since they were always under the rule of other political powers and the historical sources usually mention those in power and not those who are subordinated, Tocharians fell out of the scope of the historical sources after the eighth century, as if they did not exist anymore.

After this introduction, we can now take a closer look at the administrative, economic, and religious reasons.

A) *ADMINISTRATIVE REASON:*

First, let us start with why Tocharian seems to have ceased being a written code for the domain of administration. First, we should not forget that, after the regions where the Tocharians lived came under the rule of the Tibetans in 790, the socio-political administration of all the Tocharian cities and territories between Turfan and Kucha fell completely into the hands of the Tibetans. Therefore, Tibetan turned into a language with overt prestige; Tocharian, which had held overt prestige until then, suddenly turned into a language with covert prestige. The language of administration switched from Tocharian to Tibetan. In addition, the Tibetans used their own alphabet instead of the Brahmi alphabet of the Tocharians. I argue that this is the main reason that Tocharian was no longer a written code for administration. Undoubtedly, the situation was the same in the Uyghur era (after 866) as well. Uyghurs also had their own alphabet. In the second half of the tenth century, when the Uyghurs converted to Buddhism due to the Tocharians, Tocharian Buddhist missionaries introduced the Brahmi script to some manuscripts as well. However, dating the few Old Uyghur texts with the Brahmi alphabet presents many problems.

B) *ECONOMIC REASON:*

We also need to take a brief look at the economics of Buddhism and the relationships between economic activities and support for Buddhism in order to understand why Tocharian was no longer used as a written code for the domain of economy. According to J. Elverskog, because of its intimate connection with the business world, the spread of Buddhism coincided precisely with the expansion of

⁶⁵ Aydemir 2021a: 315.

trade routes, cities, and ultimately imperial territories. This relationship also meant that as trade networks shifted and broke down or empires collapsed, so did the institutions of Buddhism⁶⁶ and the local Buddhist communities as well. Thus, it is no coincidence that Tocharian Buddhism and Buddhist Tocharian people flourished for centuries because they lived on one of the world's most important trade routes, the Silk Road, and controlled it. But being on the Silk Road was also a disadvantage for the Tocharians because each of the regional great powers (Chinese, Tibetans, Turks, and Uyghurs) wanted to encircle the Silk Road under its own rule. In my analysis, as soon as the Tocharians lost their control over the Silk Road, Tocharian Buddhism began to decline in the Tarim Basin and the Buddhist Tocharian people along with it. In examining the collapse of the Tocharian people, we should not ignore this significant connection.

I therefore assume as a working hypothesis that the decline of Tocharian Buddhism and its institutions may actually have begun after 790, when control of the Tarim Basin and thus the Silk Road passed from the Chinese to the Tibetans. This is because the route of the Silk Road, which had operated freely and safely until then, may have been threatened by the wars fought between the Tibetans and the Uyghurs for control over the region between 790 and 866. The dangers of the Tarim Basin section of the Silk Road undoubtedly hindered the flourishing trade and may even have stopped it for a long time. Since “the establishment and survival of Buddhist institutions, especially monasteries, depend on access to economic and material resources,”⁶⁷ the Tocharian Buddhist institutions may have begun to decline due to the loss of these resources. Because “in order for a Buddhist monk to be able to become disengaged with the material world, he must have an economic basis from which he gains sustenance—an economic basis that was provided by the laity who were increasingly gaining access to economic resources”⁶⁸ under Chinese rule until 790.⁶⁹ In the period after 790, the Silk Road trade was, in all

66 Elverskog 2010: 25.

67 Williams-Oerberg 2019: 22.

68 Brox / Williams-Oerberg 2015: 505.

69 The Chinese secured the Silk Road and trade routes from China to the borders of Bactria in the west when the entire Tarim Basin was under their rule between 640 and 790. The Tocharians, especially the institutions of Tocharian Buddhism, benefited from this.

probability, disrupted or drastically reduced, perhaps even closed, because it was not secured any longer by the Chinese. Thus, the laity (especially merchants, rich donors, elites, landed gentry, etc.), who until then had provided the economic basis for Buddhist monks to live on, probably had less and less access to economic resources after 790, due to Tibetan rule and the chaotic conditions in the Tarim Basin. This may have caused Tocharian Buddhist institutions to decline or even disappear. Based on practices in other Buddhist communities, I assume that not only did the Tocharian laity provide them with an economic basis (e.g., food, clothing, money, goods, services, land, and monasteries, etc.), but the monasteries and monks themselves may “have been engaged in economic activities and have played significant economic roles in society.”⁷⁰ Namely, research has shown that in some Buddhist societies, “monks were allowed to keep money, sell donations given to them for profit, lend out money, and collect interest as long as profits went to the Buddha, dharma, and sangha.”⁷¹ Thus, the monks and monasteries could continue commercial activities and monastic income-generating activities, which “historically included money-lending practices; mutual-financing associations; land-leasing operations; producing and selling commodities such as flour, silk, oil, and medicine; running businesses like grain mills, oil presses, and hostels; receiving donations in the form of cash money, land, and religious artifacts; and accepting sponsorship toward collective religious activities, refurbishment of temples, and so forth.”⁷² J. Elverskog rightly states, “monasteries functioned as banks in this early period.”⁷³ After all this, it is not surprising that Tibetans and Uyghurs would take over the “wealthy” Buddhist institutions of the Tocharians.

As can be seen clearly from the above, the economy and Buddhism have been tightly intertwined throughout the history of Buddhism, and the survival, strengthening, decline, or collapse of Buddhist societies has always depended on the strength of their relationship with the economic environment and the political powers of the time. Therefore, the deterioration or termination of their relationship with political powers, the economy, and the economic environment have always had a

⁷⁰ Brox / Williams-Oerberg 2015: 505.

⁷¹ Brox / Williams-Oerberg 2015: 506.

⁷² Brox / Williams-Oerberg 2015: 506–507.

⁷³ Elverskog 2010: 47.

negative effect on Buddhist communities and Buddhist activities, including the production of Buddhist literature. Undoubtedly, this also happened in the period after 840, when the areas inhabited by Buddhist Tocharians came under the rule of the Uyghurs. Thus, the decline of Tocharian culture and Tocharian languages, which I assume in fact started with the dominance of the Tibetans after 790, would have continued with the arrival of the Uyghurs in 840–866, and been completed when the western Tocharians came under the rule of Karakhanid Turks by the middle of the eleventh century, as we will see below.

Since the eastern part of the Tarim Basin as far as the city of Kucha in the west, including that part of the Silk Road, were now completely under the rule of first the Tibetans and then the Uyghurs, all the economic resources necessary for the survival of the Buddhist temples, monasteries, and Tocharian Buddhist clergy may have been in the control of the Tibetans and Manichaean Uyghurs. Considering that the Manichaeans must have destroyed the main Buddhist temples and monasteries and suppressed the Buddhists in the period after 840, then one can imagine the difficult situation the Tocharian clergy was in. Because of the new situation, the remaining smaller Buddhist temples and monasteries in the territory of the Turfan Uyghur Kingdom also presumably lost their sources of income and the economic resources necessary for their survival. The effects of this would then be reflected in all Buddhist activities, including the production and copying of Tocharian Buddhist manuscripts in Brahmi script, which surely were quite expensive and difficult to produce at the time (due to the rarity of paper and difficulty procuring it).⁷⁴ All the financial resources to carry out such Buddhist activities were in the hands or control of the Manichaean Uyghurs and thus the Manichaean Church. Material support from businessmen, merchants, local rulers, and elites may also have drastically reduced or even stopped if it was no longer advantageous to support the Buddhist activities of Tocharians under the Manichaean Church. In short, the current economic environment and economic exchanges have always played a vital role in the survival and spread of Buddhism and Buddhist societies. No doubt this was also the case with the Buddhist Tocharian clergy.

⁷⁴ We can experience similar situations even today. For example, in 2021 and 2022, there was a printing paper shortage due to rising raw material costs and problems in the supply chain. As a result, paper production decreased around the world, and therefore the printing of books decreased and even stopped for a long time. This affected me personally, when I wanted to publish a book in 2021.

C) *RELIGIOUS REASON*:

The most important question is “Why did Tocharian apparently cease being a written code for the domain of religion?” On this subject, I will present inferences that I consider probable based on earlier precedent cases and some facts. I propose that the main factors were as follows: (1) The Tibetan authorities likely got their hands on all the economic resources and financial support systems of the Tocharian Buddhist institutions. This situation had a negative impact on Tocharian Buddhist communities and Buddhist activities, including the production of Buddhist literature. (2) The same could have happened under Uyghur rule after 840 or 866, if any such support systems remained. (3) The ruling class of the Uyghurs was, namely, Manichaean, and there was an unending rivalry between Manichaeism and Buddhism. To understand how this impacted the use of the Tocharian language in religious activities, we need to take a very brief look at the rivalry between Buddhism and Manichaeism in Central Asia prior to 840.

Manichaeism, represented by the Sogdians, became the religion of the First Uyghur Khaganate in the Mongolian steppes in 762 and was privileged over other religions or beliefs. As a result, Sogdian clergy, advisors, and interpreters served in the Uyghur court. Because of existing rivalries between Manichaeism and Buddhism, adherents of each religion tried to undermine the other whenever they had the chance. An example can be seen in the edict of the Buddhists in China from 732 (when Manichaeism entered China) declaring that Manichaeism “*deserves to be strictly prohibited*.”⁷⁵ The Buddhists failed to outlaw Manichaeism in China, but the Manichaeans succeeded in banning Buddhism in the First Uyghur Khaganate of the Mongolian steppes. After the Uyghur Khagan converted to Manichaeism in 762 and declared it the privileged religion, he ordered that “*all the [Buddhist] images of demon sculptures or paintings be entirely destroyed in fire, that those that paint the demons and who prostrate themselves before the demons be [lacunae] and receive the Religion of Light [i.e., Manichaeism]*.”⁷⁶ Based on this, we can assume that many Buddhist documents and manuscripts may have been destroyed by fire.

Based on the above precedents, I assume that after 840 or 866, when the Uyghurs came to the

⁷⁵ For more information about this decree, see Scott 1995: 149.

⁷⁶ Scott 1995: 149; Chavannes / Pelliot 1913: 195–196.

Tarim Basin, the rivalry between Manichaeism and Buddhism continued there too, and the Manichaean Church suppressed Buddhists in the Tarim Basin as well. We do not find any data on this rivalry in historical sources because there are no historical sources concerning the Turfan (Kocho) Uyghur Kingdom in the Tarim Basin of the ninth–thirteenth centuries. Therefore, we know almost nothing about the history of the Uyghurs in the Tarim Basin. But considering the previous precedents, it is hard to imagine that the enmity between Manichaeism and Buddhism did not take place in the Tarim Basin. It also is highly probable that the Manichaean Church confiscated important Buddhist temples and turned them into Manichaean temples, as well as confiscating the Buddhist Church's sources of income and even destroying central Buddhist temples, monasteries, and archives where Buddhist literature and manuscripts were produced, copied, and stored. It should not be forgotten that not only Tibetans and Uyghurs but also Buddhism and Manichaeism were struggling to dominate the region. In addition, since the Tibetans were Buddhists, like the Tocharians, in the beginning the Manichean Uyghurs likely saw Buddhism and its institutions as the cultural heritage of their enemies, the Tibetans. There may be parallels between what the Manichaeans did to the Buddhists in the Mongolian steppes after 762 and what they did to the Tocharian Buddhists in the Tarim Basin in the early 840s. The suppression of the Buddhists in the Tarim Basin also means the suppression of the Tocharians and probably the destruction of many Tocharian Buddhist documents and manuscripts.

Although Takao Moriyasu makes no mention of such suppression of the Manichaean Church and thinks that there was a “peaceful coexistence” after 840 until the second half of the tenth century, he acknowledges that Buddhist literature in the Tarim Basin after 840 had been produced under the “oppressive influence” of Manichaean literature.⁷⁷ I find Moriyasu's views on the relationship between Manichaeism and Buddhism in the Tarim Basin contradictory. As we will see below, in the middle of the tenth century, when the suppressed Tocharian Buddhism finally overcame Manichaeism to become the privileged religion of the Uyghurs,⁷⁸ tension between the Manichaeans and Buddhists in Tarim Basin also surfaced. Namely, as Moriyasu himself writes, “As the tension grew, aggressive incidents took place, such that Manichaean places of worship were destroyed and Buddhist temples were erected in

⁷⁷ Moriyasu 2004: 183.

⁷⁸ Moriyasu 2004: 38, 174–192.

their place” around the turn of the eleventh century. Moreover, Buddhists took revenge on the Manichaeans by destroying sources on the history of Uyghur Manichaeism.⁷⁹ This clearly shows that there was not actually “peaceful coexistence,” as Moriyasu thinks. It only appears that way. Therefore, unlike Moriyasu, I argue for forced coexistence and not peaceful coexistence. In other words, the Tocharian Buddhists had to endure the suppression of the Manichaeans for more than a hundred years after 840, simply because they were under pressure; during this time the Tocharian Buddhism Church stagnated and struggled to survive—but also worked to infiltrate the Uyghur ruling class.

Around the middle of the tenth century, Tocharian Buddhism gained strength again, infiltrating the Uyghur ruling class⁸⁰ and beginning to strongly influence the Uyghurs linguistically and culturally. They succeeded in converting the Uyghur ruling class to Buddhism.⁸¹ Around the turn of the eleventh century, as soon as Tocharian and Uyghur Buddhists held significant power, they began to do to the Manichaeans what had previously been done to them. Manichaean places of worship were destroyed, and Buddhist temples were erected in their place. The consequence of this religious conversion is that two of the earliest, largest, and most fundamental Buddhist works in the Old Uyghur language, *Maitrisimit* and *Daśakarmapathāvadānamālā*, were translated from the Tocharian language at this time, i.e., in the second half of the tenth century.

The events detailed above could be the main extralinguistic factors explaining why “by the end of the eighth or ninth century CE, Tocharian seems to have ceased being a written code for the domains of religion, administration, and economy.”⁸² However, this question requires further research to better understand the events of this era that remain in the dark.

79 Moriyasu 2004: xvi, 182–183.

80 Moriyasu 2004: 183.

81 As J. Elverskog writes, the reasons for the conversion of the Uyghur rulers from Manichaeism to Buddhism are not entirely clear. According to him, a likely scenario is one proposed by L. Clark, who “presumes that it was an attempt to unify the kingdom, whose populace was apparently in the majority Buddhist, against the expanding Islamic Karakhanids” (Elverskog 1997: 9). M. C. Brose also agrees (Brose 2017: 9).

82 See above, Schaefer 2010: 451.

2. EVENT 2

BEGINNING OF TOCHARIAN-UYGHUR LANGUAGE CONTACTS
(NINTH CENTURY)

As described above, after the collapse of the First Uyghur Kingdom in 840 CE, the Uyghurs scattered, and the greater part of them fled en masse from the Mongolian steppe to the northeastern regions of the Tarim Basin, which was predominantly inhabited by Tocharians. Hence, Tocharian-Uyghur interethnic and casual linguistic contact began in 840. However, the Uyghurs were able to fully settle in the northeastern areas of the Tarim Basin only after they finally defeated the Tibetans, who controlled that region, in 866. For this reason, K. Czeglédý determines the Kocho (Turfan) Uyghur Kingdom was founded in 866.⁸³ Based on this, the dominance and influence of the Uyghurs in the Tarim Basin and their intense language contact with the Tocharians could have started only from 866 on.

Their kingdom was centered in the cities of Turfan and Beshbalik, the winter and summer capitals in the northeastern part of the Tarim Basin. This region was originally the territory of the Eastern Tocharians, the TochA speakers. As described above, they were the leading clan of the Tocharian tribal union, with the name *Yākī Tugrak* ‘Yākī (= TochA) and Tocharians (= TochB),’ in the first half of the ninth century, before they came under the rule of the Uyghurs. So when the Uyghurs arrived, they probably first came into contact with the leading clan of the Tocharian tribal union, the TochA group, as was usual on the steppe.

However, TochB groups were also present in the northern and eastern parts of the Tarim Basin. Based on the ethnotoponyms *Arki*, *Argi* referring to the TochA groups, and *Tugur*, *Tugurik* (Chinese *Tugulike*, etc.) referring to the TochB groups, it appears, contrary to the general view, that the TochB groups were spread almost throughout northern, eastern, and western Xinjiang, while the TochA groups were spread only between Hami (Kumul) in the east and Kucha in the west.⁸⁴ Thus, in terms of language geography, the term “Western Tocharian” used for TochB does not seem quite appropriate.

I suppose that at the beginning, i.e., starting in 866, the relations of the leading Uyghur clans with the Tocharians were probably only sociopolitical and socioeconomic. The ruling dynasty of the

⁸³ Czeglédý 1984: 160.

⁸⁴ For the historical geography of TochA groups, see Aydemir 2019: 282.

Uyghurs were Manichaeans, although the same cannot be said about the Uyghur common people, who consisted of many subordinated non-Uyghur Turkic clans.⁸⁵ As was usual on the steppe, the beliefs of the common people and the ruling classes were often completely different. Among the Old Turkic common people, for instance, there were also shamanists, animists, and totemists. The same was likely true for the Uyghur common people. This also means that the majority of Uyghurs were probably not Manichaeans. It is highly probable that the missionary activities of the Tocharian Buddhist monks started first among the Uyghur common people, roughly after 866.

The trilingual manuscript (Sanskrit, TochB, and Old Turkic of non-Uyghur type), processed by Dieter Maue and dated the second half of the ninth century may, in my opinion, be a result of the Tocharian Buddhist missionary activities among the Uyghur common people that began in this period.⁸⁶ It may, however, also belong to the Basmyl Turks, who, as mentioned above, fled to the Beshbalik region in the north of Turfan from the Mongolian steppe in 744. The Basmyls seem to have become the regional neighbors of TochB groups in present-day Hutubi County, in the northwestern part of Turfan, where at least six settlements of TochB groups can be identified.⁸⁷ All of these are only well-founded assumptions, but it is certain that the Tocharian influence on Old Turkic in the Tarim Basin could have already started in this early period with Buddhist missionary activities. For example, Maue rightly thinks that the *bar(i)gma* '(Buddhist) novice' in the Old Turkic part of the trilingual text in question would be a semantic calque and was probably formed on the Tocharian pattern. As Maue pointed out, the OTu. <bargma> *bar(i)gma* is a substantivized imperfect participle in *-(X)gmA* from the OTu. *bar-* 'to go (away)' (i.e., *bar-(i)gma*). The OTu. verb seems to have extended its meaning exclusively in the Buddhist context in the direction of *bar-* 'to go (away)' → *'to leave (home in order to enter the monastic order)' → 'become novice, monk' and in this way emerged *bar(i)gma* *'a person leaving (home)' → 'novice.' According to Maue, the pattern may have been the TochB *lät-* 'go out' in the phrase *ostmem*

85 It is a well-known fact that the tribal union with the name *Tokuz Oguz* (~ *Tokuzguz*) 'The Nine Tribes' led by the Uyghurs in the Mongolian steppe consisted of many subordinated Turkic tribes.

86 IOL Toch 81 (Maue 2008). As Maue pointed out, the manuscript is written in Brahmi script with Tocharian writing norms but differs from the Old Uyghur standard both linguistically and terminologically. Its place of discovery is not known.

87 For the Tocharian ethnotoponyms (*Tugur*, *Tugurik*, Chin. *Tugulike*, etc.) referring to the TochB groups in Hutubi County, see Aydemir 2013: 92, Nr. 5, 5a, 5b, 7, 26, 27 on the map; see also Nr. 17, 18 in Barköl in the east of Beshbalik on it.

lät- ‘leave home’ → ‘become a monk,’⁸⁸ which, as Maue mentions, can also be seen in Skr. *pravrajita* ‘monk’ ← ‘who left (the home).’ But the additional meaning of the Old Turkic verb should have been limited only to the Buddhist context. It is clear that, in the case of the OTu. *bar*-, there was a semantic interference from TochB in this unknown Old Turkic (non-Uyghur) language. Here the question emerges as to which group introduced this semantic interference into the OTu. language in question. But, as in many similar cases,⁸⁹ because of the lack of sociolinguistic information, we are not able to tell who introduced it. It could have been introduced either by Turkic monks or by Tocharian missionaries, who probably were, to a certain extent, speaking Old Turkic as well. The latter seems more likely to me. This kind of semantic interference by TochA or TochB in the domain of Old Uyghur Buddhist terms may have been relatively frequent in the very beginning, but we do not know much about it since other instances of this have not been collected yet.

In this early period, that is, in the second half of the ninth century, Tocharian Buddhists may have carried out their missionary activities among the Uyghur common people (most of whom were probably not Manichaeans) while under the suppression of the Manichaean Church. The efforts of these Tocharian Buddhist missionaries bore fruit in the second half of the tenth century when Tocharian Buddhism, deeply rooted in the region, gradually infiltrated the newly arrived Uyghurs. In the second half of the tenth century, Buddhism finally spread to the Manichean ruling class of the Uyghurs as well, starting with the royal family.⁹⁰ It is therefore no coincidence at all that two of the

88 Maue 2008: 68; see also Adams 2013: 598; cf. also the Middle Chinese Buddhist term *chūjiā* 出家 ‘to leave the family or home (to become a Buddhist monk or nun)’ (Giles 1912: 320, no:2620a) from the *chū* 出 ‘go out’ + *jiā* 家 ‘home; family.’ I may be wrong, but the Chinese term seems also to be a semantic calque from the TochB(?) *ostmeṇ lät*- ‘leave home; become a monk;’ cf. TochB *lät*- ‘go out’ and Chin. *chū* 出 ‘go out.’

89 E.g., in the case of the OUyg. *dyanl(i)g közin* ‘by the *dhyāna*-eye’ (i.e., ‘meditation-eye’) in a *Daśakarmapathāvadānamālā* fragment (Wilkens 2007: 292; Wilkens 2016b: 814, line 11049), which, as Maue points out, is a partial calque from TochA *dhyāṇ-ṣiṇ lyākatsuneyo* ‘by the *dhyāna*-seeing’ or its variant OUyg. *dyan köz* ‘meditation-eye’ in another TB-OUyg. bilingual fragment of unknown date. The equivalent of the latter one is not attested in TochA/B, though based on the first example; the direct source is most likely TochA/B, as Maue suggests. And, again, we do not know whether the partial translation of this Buddhist term was done by the Uyghur monks or by the Tocharian missionaries (Lundysheva / Maue / Wille 2021: 76, 78).

90 Moriyasu 2004: 183.

largest and most fundamental Buddhist works in the Old Uyghur language, *Maitrisimit* and *Daśakarmapathāvadānamālā* (late tenth century), were translated from the TochA language (i.e., OUyg. *tuyre tili* 'Tocharian language').⁹¹

Contrary to most researchers, who think that Tocharian was already extinct after about 800 and thus these two Buddhist texts were copied by Buddhist Uyghurs in the late tenth century, I think that these two Buddhist texts refer to TochA, which was still a prestige language in the second half of the tenth century and was not yet under serious threat. Thus, the process of language loss had not started yet, and the TochA was not endangered yet but only threatened. As I have shown above, Tocharians did still exist in the ninth century (see above the tribal unions *ctβ'r twyr'k* and *Yākī Tugrak* from the ninth century). More importantly, the *Yākī Tugrak* tribal union from the ninth century clearly proves that the TochA group (i.e., *Yākī*) did still exist at that time, and they were at the height of their strength as the leading clan of the union.

Here, the question arises whether TochA was still spoken in the second half of the tenth century at all or if it was just a liturgical language, as some believe. The idea that TochA was a liturgical language for the Old Uyghurs is, in my opinion, baseless and illogical. It raises the following critical questions: (1) Were there two liturgical Tocharian languages for Uyghurs? Namely, in Old Uyghur, both TochA and TochB have a strong linguistic influence. Chronologically, first TochA and then TochB influenced Old Uyghur linguistically. (2) Consider that Uyghurs really only started to dominate the Tarim Basin in 866 CE, and the strong TochA linguistic and cultural influence on Old Uyghur must have arrived almost a century later, in the second half of the tenth century, since the Uyghurs were Manichaeans when they arrived in the Tarim Basin. If Tocharians and the Tocharian languages (A and B) were already extinct in the eighth century, from whom did the Uyghurs learn these two liturgical languages? Did they learn them from the Sogdians, Khotanese, Tibetans, or Chinese? (3) How could TochA and TochB survive as liturgical languages from the eighth century to the second half of the tenth century if both languages were already extinct in the eighth century? Overall, the theory of liturgical language does not hold up.

⁹¹ As I explained above, the Sogdian exonym *Tuyre* for Tocharians goes back to the Sogdian adjective form <twyr'k> *Tuyrak*; i.e., OTu. <twqry> *Tuyre* ← Sogdian **Tuyre* < *Tuyrak* < *Tugur* + -'k ← *Tugur* 'Tocharian.' For the reading *Tuyre* in OTu., see also the same ethnonym *Tuyre* (i.e., *twgry-st'n*) in the designation *ch'r twgryst'n* / *čahār tuyrestān* 'The Country of the Four Tuyre' in Middle Persian in Manichaean script as explained above.

But if we consider that the *Yāki* clan (i.e., Tocharian) was in a leading and prestige position in the first half of the ninth century and that interethnic and language relations with Uyghurs really only started after 866, it is completely justified to think that some Tocharian groups still preserved their own language in the second half of the tenth century as well. If we calculate from 866, it is, in my opinion, pretty hard to think that the Tocharian (*Yāki*) society at the height of its power first went through the processes of *bilingualism* → *language loss* → *language shift*, or *language death* and was already extinct in the second half of the tenth century, that is, in a relatively short period of about one hundred years, especially as there had not yet been a situation that would incite this process.

But assuming the worst-case scenario, let us suppose that the language shift of Tocharian speakers took place within three generations starting in 866, and the third generation already spoke Old Uyghur. A human generation spans about twenty to thirty years, depending on gender and society. If we consider the average generation to be twenty-five years, then even in the worst case, the second generation of Tocharian speakers would have been alive in the first half of the tenth century. It may even be that Tocharian was still a thriving and prestigious language in the second half of the tenth century, but let us examine the facts. In particular, radiocarbon datings of some manuscripts show that we have at least three Tocharian fragments (THT1018, THT1068, and THT1030)⁹² dated to the tenth century from the territory of the Turfan Uyghur Kingdom in the Tarim Basin. Among them, the Tocharian fragment from the city of Sengim (THT1030)⁹³ is particularly important, as it is dated to the end of the tenth century or to the beginning of the eleventh century, between 985 and 1022. This proves that Tocharian still existed at the end of the tenth century or the beginning of the eleventh century. Based on these three Tocharian manuscripts and the fundamental works (*Maitrisimit* and *Daśakarmapathāvadānamālā*) mentioned above, I think that it is unjustified to suppose that Tocharian was already extinct in the eighth century. It is, however, completely justified to assume that people who were producing texts (i.e., THT1030) at the end of the tenth century or at the beginning of the eleventh century survived into the eleventh century as well. To assume the “sudden disappearance” of the Tocharians in the first half of the eleventh century, sociolinguistically, would require a “sudden language death” or “radical language death” model, which

⁹² See Tamai 2005.

⁹³ It is forty kilometers east of Turfan (42°56'00.0"N 89°39'00.0"E).

is not justified. In contrast to TochB, which, as we will see below, was probably already extinct by the end of the thirteenth century or at the latest by the beginning of the fourteenth century, it is not possible to know when TochA in the Tarim Basin died.

I tentatively assume that TochA may have been extinct in the Tarim Basin by the end of the eleventh century or sometime in the twelfth century, but I could not find any hint concerning the existence of TochA speakers in the twelfth century, possibly because (1) their language contact with the Uyghurs had already begun in 866, (2) they may already have been bilingual at the end of the tenth century, (3) they were probably a comparatively small community compared to TochB, and (4) because, as they were the rulers and elite of the Tocharian society in the Tarim Basin, they could easily mix with the Uyghur ruling and elite classes. All things considered, I tentatively assume that the language shift process of the TochA groups in the Tarim Basin lasted for about 250–300 years—a gradual language death. As Sasse and Thomason predict, the first step is that the lexicon is lost when a language is excluded from domains where it used to be employed.⁹⁴ The loss of the Tocharian A and B lexicons may have started in the domains of administration and economics first when both were excluded from these two domains after 840 or 866. This can serve as an interesting analogy for researchers of language shift or language death because, in other cases, the stages of language loss take place in a different order and, especially in historical periods, we are not always lucky enough to establish how a language shift or language death process began. Over time, the lexicon of Uyghur Buddhism replaced the lexicon of Tocharian Buddhism, although many Buddhist terms were borrowed from TochA (and TochB) into the Old Uyghur during this process.⁹⁵ No hint of TochA has yet been found in modern Uyghur or its eastern dialects, but no one has investigated this issue so far. However, traces of their settlement names (i.e., *Arki*, *Argi*, and *Arčī*) can still be found in the eastern part of the Tarim Basin and in historical sources (i.e., *Yākī* < *Yarkī*).⁹⁶

Apart from the TochA society in the Tarim Basin, however, there was another TochA society that was not known until now. This second TochA society was living outside the Tarim Basin in the

⁹⁴ Sasse 2019: 19; Thomason 2001: 228.

⁹⁵ For Tocharian A and B borrowings in Old Uyghur manuscripts, see Wilkens 2021 and Wilkens 2023.

⁹⁶ For their names, *Arki*, *Argi*, and *Arčī*, and their settlement geography, see Aydemir 2019: 282, map 3.

mountains in the southerly part of the Ili Valley. Mahmud al-Kashgari, the eleventh-century Turkic linguist, provides information about a bilingual Turkic tribe called *Argu* in his bilingual (OTu.-Arabic) dictionary of Turkic languages from 1074/1077 CE. According to Kashgari, *Argu* is the name of a Turkic tribe and the country between Tiraz (i.e., Talas, Kazakhstan) and Balasagun (southeast of Tokmok, Kyrgyzstan).⁹⁷ He notes that “*There is a slurring (rikka) in the speech of the people of the entire country of Aryu, which is considered to extend from Isbījāb [now Sayram, Kazakhstan, H.A.] to Balāsāyūn.*” He also notes that “*Those who have two languages and who mix with the populace of the cities have a certain slurring (rikka) in their utterances – for example, Soydāq, Kānčāk and Aryu.*”⁹⁸ This information

97 For Kashgari, see Dankoff / Kelly 1982–1985: 151 (Volume 1). The *Argu* question actually requires a separate study, but in short, it can be said that (1) *Argu* as a country name appears also in an Old Uyghur Manichaean manuscript in Uyghur script known as “Argu Colophon” and refers to the same geographical area in Kashgari. According to Larry V. Clark, this manuscript must belong to the early eleventh century. This name is written once as *Argu* and once as *Arugu* in the colophon. Based on this, Clark suggests that *Arugu* is the original form and may be of Iranian origin. He matches it with the Parthian *’rg’w* [argāw] ‘noble, fine, pleasing’ (Clark 2017: 68–74; cf. also Moriyasu 2015: 47–50). Clark’s suggestions about *Arugu* are unjustified. Since *Argu* (< *Argi* < **Arki* > *Ārsī*) is a comparatively older form, *Arugu* may be a name variation or misspelling. The latter is the last option to think about. This colophon has great importance for the history and cultural history of the Tocharians since it clearly refers to the fact that *Argu* were actually still Manichaeans in the early eleventh century before they converted to Islam sometime during the eleventh or twelfth century. (2) The name *Argu* also appears in an eighth- or ninth-century Old Turkic Yenisei (E42) runic inscription as a part of the designation *Üč Argu* ‘Three Argu’ (Yudong / Juanjuan 2022: 600–602). According to Yudong and Juanjuan, however, “it is difficult to give a perfect explanation for” *Üč Argu*. But, as a matter of fact, this is actually the numerical designation of a tribal confederation called *Üč Argu*, which consisted of three (i.e., 1+2) tribes, among which *Argu* was apparently the leading tribe; hence, the confederation was named *Argu*. The numerical designation of tribal confederations was an ancient Turkic political tradition (about this tradition, see Czeplédy 1972). Therefore, *Üč Argu* should be understood as “The Three Argu (tribal confederation).”

98 Dankoff / Kelly 1982–1985: 83–84 (Volume I). *Soydāq* denotes ‘Sogdian(s)’ (i.e., *Soyd* + *’k*), but it is not clear whom *Kānčāk* refers to. Kashgari notes that the dialect of *Kānčāk* is not of Turkic origin and is spoken in the villages of the city of Kashgar. I think it may have been a population that most likely spoke an Iranian language, most likely a dialect of Khotanese, since especially these western areas of the Tarim Basin (i.e., Kashgar, Khotan) were inhabited for centuries by the Saka people of Iranian origin. As a working hypothesis, I tentatively assume that *Kānčāk* may originally have been an exonym and, thus, the final *-k* in *Kānčāk* may be the Sogdian adjective suffix *-’k* (cf. *Soyd* + *’k*), as well as its base being perhaps **Kenč(e)* or **Kanč(a)* (i.e., **Kenč(e)* / **Kanč(a)* + *’k*).

provided by Kashgari clearly proves that the *Argu* people were still bilingual (TochA–Old Turkic) at the end of the eleventh century and that TochA was not yet extinct.

Scholars considered the *Argu* people to be of Sogdian origin,⁹⁹ but this is not supported by facts. I suggest that the country called *Argu* between Tiraz (i.e., Talas) and Balasagun got its name from the *Argu* people of TochA origin. *Argu* certainly goes back to the form of *Argi* (i.e., *Argu* < *Argi* < **Arki*). *Argi* is the name of some TochA groups in the Tarim Basin as well.¹⁰⁰ *Argu* was described in Kashgari, and its eastern part, Balasagun, was located in the south of the Ili Valley, where Chinese sources mention the Yuezhi (i.e., TochA speakers). When the Yuezhi were attacked and defeated by the Huns (176 BCE), they split into two fractions, the Greater and Lesser Yuezhi. Their homeland was a territory between Dunhuang and present-day Qilian in the Hexi Corridor). In 162 BCE the greater part of them migrated westward, first to the Ili Valley and, around thirty years later (132 BCE), via Sogdiana (central in modern Uzbekistan) southward to Bactria (present-day Afghanistan), where they settled.¹⁰¹ As I have already shown, the Yuezhi were actually TochA speakers.¹⁰² Consequently, it is not surprising to find the *Argu* exactly where we would expect from their mention in Chinese sources. Based on this evidence, I have no doubt that the *Yuezhi* (i.e., *Yarki*, *Arki*) mentioned in the Ili valley in Chinese sources, and the *Argu* mentioned in the same location by Kashgari, are one and the same. *Yarki* (i.e., *Yuezhi*) was, however, only a name variant and a designation for the ruling dynasty of the TochA groups in Gansu in ancient China. The groups that fled from Gansu and migrated via the Ili Valley to Bactria seem to have been *Yarki*, *Arki*, and *Argi*. The *Argi* group seems to have split off from the *Yarki* and *Arki* groups in the Ili valley, the group we see later under the name *Argu* (< *Argi*) in the late eleventh-century work of Kashgari. *Yarki* and *Arki* groups migrated from the Ili Valley further into Bactria, which can later be found in the sources under the name *Kushan*. But both *Yarki* and *Arki* can be found as ethnotoponyms

⁹⁹ Barthold 1935: 81–82; Doerfer 1971: 173; Krippes 1991: 69; Golden 1992: 229; Yudong / Juanjuan 2022: 593.

¹⁰⁰ For the place names of *Argi* in the Tarim Basin, see Aydemir 2019: 282, map 3.

¹⁰¹ For the history and migrations of Yuezhi, see the following studies: Haloun 1937; Maenchen-Helfen 1945; Enoki et al. 1996; Thierry 2005; Liu 2001; Mallory 2015; Benjamin 2007; Yu 2010.

¹⁰² Aydemir 2019.

in and around present-day Afghanistan, where *Arki* changed to *Arči* over time.¹⁰³ This forms the historical evidence for the Argu as Tocharian speakers.

Regarding the linguistic evidence as a second criterion, for now I have identified only one word of possible TochA origin among the words referred to by Kashgari as Argu. It is *op* ‘threshing ox,’¹⁰⁴ which, according to Kashgari, can only be found in the dialect of Argu. I assume that the OTu. *op* in Argu dialect is a reflex of the TochA *ops-* ‘ox.’ Namely, according to Pinault, *ops-* goes back regularly to the form **ops(o)* (< **okso* > TochB *okso* ‘ox’, i.e., *-ps-* < **-ks-*).¹⁰⁵ It is not clear, however, whether the *-p* in Argu instead of **-ps* was a sound substitution, i.e., nativization (OTu. *op* [op^h] ← TochA **ops-*) or a sound change (Argu *op* [op^h] < TochA **ops-*) in Argu.

There is also another word of TochA origin, *tana* ‘a grain of coriander’ referred to by Kashgari as Argu and Uč.¹⁰⁶ I believe that Kashgari did not include many Argu words of TochA origin in his Old Turkic dictionary, thinking that they were not of Turkic origin. It is, however, worth searching for such linguistic relics (microtoponyms, ethnotoponyms, hydronyms, structural influences in local dialects, etc.) in the northern dialects of Kyrgyzstan and in the southern dialects of Kazakh, especially in dialects along the northern slopes of the Kyrgyz Ala-Too Range in northern Kyrgyzstan and also in dialects of the region lying between the Tokmok (Токмок)–Taraz (Тараз)–Shu (Шу) triangle, since, according to Kashgari, the Argu lived in this region “*between the two mountains*.”¹⁰⁷ As a matter of fact, as is known, languages and dialects in mountainous or isolated regions generally preserve archaic linguistic features

¹⁰³ See Aydemir 2019: 280, map 1.

¹⁰⁴ See Dankoff / Kelly 1982–1985: 87 (Volume I).

¹⁰⁵ See Pinault 1997: 202. For the loss of the original final vowels in TochA, see Adams 1988: 27.

¹⁰⁶ See Dankoff / Kelly 1984–1985: 272 (Volume II).; for the *tana*, see footnote 123 below.

¹⁰⁷ See Dankoff / Kelly 1982–1985: 151 (Volume I). Kashgari apparently means the Chui (Chuy) Valley between two mountains in northern Kyrgyzstan (coordinates: 42.864794, 74.896776). This valley is adjacent to the Ili Valley, just north of it. This cannot be a coincidence, because according to Chinese sources, the *Yuezhi* (=Tocharian A) fled from Gansu first to the Ili Valley, and, after staying there for thirty years, they migrated further to Bactria. Thus, it can be assumed that two of the three *Yuezhi* groups (i.e., *Yarki* and *Arki*) that fled here continued to migrate to Bactria, while the third group, the *Argi* (> *Argu*), moved to the relatively safe adjacent Chui Valley and the northern slopes of the Kyrgyz Ala-Too Range. Or perhaps they settled in these areas when they first migrated here in 162 BCE.

better than other regions.¹⁰⁸ Future archaeological research in this area will also contribute significantly to the history of the Argu (i.e., Yuezhi/TochA) in the narrow sense and in the broader sense of the history of Indo-European peoples in Asia, given that the Argu migrated there in 162 BCE and were there until the end of the eleventh century (1260 years or more). This situation almost guarantees that archaeological artifacts that can be considered important will come to light.

In terms of language shift and language death research, it is also worth noting that, at the time of Kashgari (late eleventh century), the speakers of Argu did not seem to have been in the last stages of the language shift process. Recall that according to Kashgari, Argu had “*a certain slurring in their utterances.*” This suggests that their Turkic pronunciation was not accent-free. In all probability, this indicates that they were not yet fully bilingual. They were very likely bilinguals with TochA dominance (i.e., TochA-WOTu.), since they came under Karakhanid rule only in the middle of the eleventh century, and before that lived in a West Old Turkic (WOTu.) environment. At the time of Kashgari, I think their bilingualism corresponded to “Phase II: *bilingualism with L1 predominance*” in Batibo’s classification,¹⁰⁹ and complete language shift may have taken a long time. Thus, I tentatively assume that the death of the Argu language happened sometime during the thirteenth century. This also means that from 162 BCE at least until the end of the eleventh century, about 1260 years, they kept their TochA language. However, their interethnic and linguistic contact with Turkic people could have started as early as 350 CE, when wary Turkic people, together with Huns, escaped from regions such as the Altai to the Ili Valley. Thus, between 350 and 370 CE the Argu probably came under the rule of the Sekel Turks in that region.¹¹⁰ Later, from 552 onward, they came under the rule of the First Turkic Khaganate, and from the late tenth century onward, the Karakhanid Turks.

¹⁰⁸ I think this may have been one of the main reasons why they were able to preserve their language (i.e., TochA) and ethnic identity (i.e., Argu) until the end of the eleventh century or maybe even longer. This region provided them with relatively good social isolation. In this way, they stayed away from the ever-changing steppe movements and therefore resisted the merging and assimilating power of the steppe for a relatively long time. This is like the situation in Colombia, where “the people of the mountains preserve their languages better than those of the lowlands and rainforests” (Crystal 2000: 89).

¹⁰⁹ Batibo 1992: 79–92.

¹¹⁰ For the migration of Sekel Turks to the region in question, see Aydemir 2023: 28, map 1.

This means that the Argu were dominated by various Turkic peoples for about 750 years and retained their language (TochA) for at least 750 years. And during all this time, they, or at least their ruling classes, were probably bilingual (TochA–Turkic). It is worth considering this example while we evaluate different language shift and language death phenomena in the Turkic and Eurasian steppe zone language contacts. The trigger event for the language's death in the case of Argu may actually have been their conversion to Islam sometime during the eleventh or twelfth century. Islam may have eliminated the cultural and social differences between Argu and Turks that were retained until that time, for about 750 years, and facilitated intermarriages between Argu and Turks. This may have caused the fusion of two different cultures (Karakhanid–Argu) and led the Argu to abandon TochA completely due to the prestige of Karakhanid Turkic. Namely, as we will see below in the chapter 4, “trigger event,” there is textual evidence from the very beginning of the thirteenth century that the Karakhanid Turkic language had great prestige in that region in the eleventh and twelfth centuries.

However, the above case also shows that linguistic prestige is not always the only factor in language shifts or deaths. Although Turkic had already been a prestige language for the Argu since 350 CE, the Argu still managed to preserve their language at least for about 750 years, that is, until the end of the eleventh century. So in this case, the main factor that caused language shift and language death was the disappearance of cultural and social differences between Argu and Karakhanid Turks, which caused cultural and ethnic fusion first and then the abandonment of the TochA language over time. The trigger event was the religious conversion of Argu. This is a common phenomenon in Turkic and Eurasian steppe zone language contact. The same phenomenon took place in the case of Szekely (i.e., Sekel) Turks, who, despite living in Transylvania since the fifth century, did not convert to Christianity until the beginning of the eleventh century and then shifted to speaking Hungarian at about the end of the twelfth century (or at the latest at the beginning of the thirteenth century), as a result of cultural and ethnic fusion over time.¹¹¹ The same sociolinguistic and language shift processes took place independently and almost at the same time in the cases of the Szekely Turks and the Argu due to

¹¹¹ For the language shift process of Szekely Turks of Proto-Turkic origin, see Aydemir 2023: 25.

conversion to Christianity and Islam at the two ends of Eurasia. As a result of this, Szekely Turks shifted to Hungarian and Argu to Turkic.¹¹²

3. PREPARATORY EVENT¹¹³

KARAKHANID TURK CONQUEST OF WESTERN TOCHARIAN LANGUAGE AREAS (LATE TENTH CENTURY)

The Karakhanid Turk conquest was the preparatory event that set the stage for the next trigger event. A preparatory event is usually the occupation, invasion, annexation, or conquest of a particular language area, territory, or region in the case of the language shift phenomena in the Turkic and Eurasian steppe zone. It can, however, also refer to joining a community through immigration in some cases of language shift. This category is only a methodological tool to better describe and typologize the Turkic and Eurasian steppe zone language shift or language death events. There may be more than one preparatory event according to different methodical approaches and depending on the definition. This terminology allows us to compare and, thus, to typologize diachronic cases of language shift and language death phenomena in different geographic regions. However, the primary goal is to uncover the causes of language shifts and language deaths in as much detail as possible.

In the case of Tocharian language shift and language death, there was one significant preparatory event: the Karakhanid Turk conquest of Kucha, the western center of TochB and Tocharian Buddhism, by the middle of the eleventh century, causing the Islamization of western TochB groups

¹¹² Only a few words remain from the original Turkic language of the Szekelys, which cannot be found in other Hungarian dialects (e.g., *kön-* 'to burn', *gilán* 'white-haired (animal)', etc.; see Aydemir 2021a: 281–290; Aydemir 2023: 23, note 74). However, with time and the death of older generations, many Turkic words may have been lost from the Szekely dialect. It is impossible to know how many words the Szekely dialect has saved up to the present day and how many have been lost over time, since the documentation of its vocabulary started relatively late. The situation is similar in the case of *Argu* as well. If we are lucky, we still have a chance to find some words of TochA (*Argu*) origin in the mountain dialects along the northern slopes of the Kyrgyz Ala-Too Range. Thus, it is worth searching for them. However, it is definitely worth researching linguistic relics in the dialect of modern Uyghur in the Ili Valley as well. Namely, I assume that they could have had close contacts with the bilingual Argu, the TochA tribe.

¹¹³ For this event, see the "flowchart" at the beginning of the study.

there. However, this expansion did not affect the other TochB or TochA groups, as they were further east from Kucha. They continued to be under Uyghur rule and remained Buddhist for a long time.¹¹⁴

The Karakhanid Turks began expanding and spreading Islam toward the east in the second half of the tenth century, gradually taking control of the western regions of the Tarim Basin. This means that, except for Kucha, the entire western TochB language area west of Kucha up to Kashgar came under the rule of the Karakhanid Turks at the end of the tenth century.¹¹⁵ “By the middle of the eleventh century, the borders of the eastern qaghanate were at Cherchen and Kucha,”¹¹⁶ and “presumably, Islam also reached Kucha by the middle of the eleventh century.”¹¹⁷ By the time of Kashgari (1074–1077 CE), however, the border of the Karakhanid Khaganate was already east of Kucha.¹¹⁸ In other words, the city of Kucha and, by extension, the TochB people there, came under the rule of the Karakhanid Turks in the second half of the eleventh century, likely severing relations with their eastern relatives, the Eastern TochA and B groups. Therefore, they presumably abandoned TochB earlier than the eastern groups.

Kucha was the most important center of Tocharian Buddhism and TochB society in the west. It has been well known since the work of renowned Tocharologist W. B. Henning in 1938 that the ethnonym *Tugrak* (< *Tugr*+ -*ak*) in the Sogdian designation *ctβ'r twyr'k* ‘The Four Tugrak (tribal union)’ in the Sogdian part of the Karabalgasun inscription (ca. 825), designated the Tocharians and the city of Kucha itself as one of the Four Tugrak.¹¹⁹ As I have already mentioned above, the *ctβ'r twyr'k* certainly could have been the name of the tribal union of the Western Tocharians, that is, the TochB speakers in and around Kucha, since it was subordinated to the *Yākī Tugrak* ‘(Y)arki and Tugrak,’ a larger tribal union of Tocharians. The important fact is that the *Tugrak* name of the Western Tocharians in and around Kucha can also be attested in a Persian work finished in 1206 CE. According to the Karakhanid

¹¹⁴ I therefore assume that the languages of the Western (TochB) and Eastern Tocharians (TochA and TochB) may have been abandoned at different times. This is discussed in detail below.

¹¹⁵ See map 11 in Bregel 2003: 23.

¹¹⁶ Bregel 2003, 26–27; see also map 13 there.

¹¹⁷ Vásáry 1993: 96.

¹¹⁸ Dankoff / Kelly 1982–1985: 329 (Volume I).

¹¹⁹ Henning 1938: 550 ff.; see also Aydemir 2009 and Aydemir 2014.

Turkic historian Mubarakshah, who started to write it in 1193, *Twyr'k* (cf. *ctß'r twyr'k*, ninth century) was a tribe of Karakhanid Turks.¹²⁰ This is clear evidence that Western Tocharians in and around Kucha preserved their societal separateness and ethnic identity, even at the end of the twelfth century and possibly even longer. This probably means that the Western TochB variety was not yet extinct at that time. They were certainly bilingual, but it is impossible to know to what degree. They were likely in the last phase of language shift since their bilingualism began sometime after 866. Of course, it is also conceivable that by this time they had already shifted to Old Turkic, i.e., Karakhanid Turkic, but there were still some among the older generation who retained some competence in TochB. However, this does not seem likely, since they were still ethnically separate, which implies that their cultural and ethnic fusion with Karakhanid Turks had not yet been completed in the twelfth century. In any case, we know that the TochB community still existed in the second half of the twelfth century. This is not surprising because, as we saw above, the bilingual Old Turkic tribe Argu in the southerly part of the Ili Valley, i.e., the TochA group, still existed at the end of the eleventh century.

We do not yet know if TochB had a structural or lexical influence on local Uyghur dialects between Kucha and Kashgar, as this issue has not yet been researched. However, there is definitely one TochB borrowing from Kucha in the Karakhanid Turkic, as well as some other TochB borrowings given by Kashgari: (1) *čātīr* 'sal ammoniac' in the Kucha dialect, cf. TochB *cātīr* 'id.';¹²¹ (2) *tana* 'a grain of coriander' in the Uč and Argu dialects;¹²² cf. TochB *tāno* 'seed, grain,' *-tanāšše* 'pertaining to grain or

¹²⁰ Ross 1922: 408; Aydemir 2009: 162 ff.

¹²¹ Dankoff / Kelly 1984–1985: 309 (Volume II); Clauson 1972: 403. According to Clauson, it is no doubt a borrowing from an Iranian language (*ibid.*). But as D. Q. Adams correctly states, it is actually a TochB (i.e., *cātīr* 'id.') borrowing in the Kucha dialect of the Karakhanid Turkic (Adams 2013: 271).

¹²² Dankoff / Kelly 1984–1985: 272 (Volume II); Kashgari takes it to be of Iranian origin. Clauson explains it from *dāne* 'grain' in Persian (Clauson 1972: 515). Adams rightly thinks that the geographical distribution of *tana* (i.e., Uč and Argu [southern Kazakhstan]) would suggest a Tocharian origin instead (Adams 2013: 303). Its Persian origin seems less probable because, in contrast to the long vowel in *dāne*, the Turkic *tana* has a short vowel. If it was of Persian origin, the vowel in the first syllable would be expected to be long in Turkic, and if it was long, Kashgari would have certainly shown it. Thus, *tana* seems to be of TochB origin and probably not of TochA origin because it is not attested in TochA; cf. Ouyg. *tana* 'coriander seed' (Arat 1930: 458, line 126), *tana* 'pearl' (in a bicoordinative construction *tana mončuk* 'pearl' < 'pearl' + 'pearl'; see Kara / Zieme 1976: 68, 97), and WMo. *tana* 'mother-of-pearl' (← OTu. *tana*).

seed'; *-tanā-mot* 'grain-alcohol or beer';¹²³ (3) *yarmak* ~ *yarmāk* 'dirham, a coin'¹²⁴ ← Sog. **yarmāk* < Sog. **yarm* + *-k* ← TochB *yarm* 'measure, extent, size.'

4. (TRIGGER EVENT) RELIGIOUS CONVERSION ISLAMIZATION OF WESTERN TOCHARIANS BETWEEN KUCHA AND KASHGAR (ELEVENTH CENTURY)

The Karakhanid Turk conquest of the western Tocharian language areas in the late tenth century was a significant historical event. Namely, the fact that the west Tocharian territories between Kucha and Kashgar in the western part of the Tarim Basin came under Karakhanid Turkic rule made way for the trigger event, i.e., Islamization, which caused a profound cultural change that started a series of processes leading to the language death of Western Tocharian. Of course, the question may arise as to whether the Western Tocharians would have shifted to Karakhanid Turkic even without the cultural change caused by Islamization. Maybe or maybe not, but we will probably never know that.

To better understand what happened during the period of Islamization and Turkization of the Western Tocharians, it is worth briefly recalling the events of the past, since they mirror events during the Karakhanid Turks' conquest. As we saw above, Tocharian ceased to be used as a written code for the domains of religion, administration, and economy after about 790, since Tibetans may have taken over Tocharian Buddhist institutions (monasteries, temples, etc.) and all of their financial resources. So the Tibetan dominion was the first wave in the decline of Tocharian culture and Tocharian languages.

The same may have happened in the next era as well. The decline continued with the arrival of the Uyghurs in 840–866 because the Uyghurs were Manichaeans, and there was an ongoing rivalry

¹²³ Adams 2013: 303.

¹²⁴ Dankoff / Kelly 1984–1985: 216 (Volume III); Clauson 1972: 969. Clauson thinks it is possibly of Tocharian origin (*ibid.*). He is right, but it is not a direct borrowing from Tocharian. I think it was borrowed into Old Turkic from Sogdian, although in Sogdian, *yarmak* or a word with a similar shape cannot be shown. But it has a clear Sogdian morphological criterion, i.e., the Sogdian adjective marker *-k*. Thus, TochB *yarm* (or TochA *yärm*?) 'measure, extent, size' (Adams 2013: 522) seems to have been borrowed into Sogdian first, where it was nativized by the *-k*, and then borrowed into Old Turkic (Karakhanid Turkic) as well; i.e., OTu. *yarmak* ~ *yarmāk* ← Sog. **yarmāk* < Sog. **yarm* + *-k* ← TochB *yarm*. The OUyg. *yartmak* 'id.' may be a secondary form, in which *-t* appears to be an inorganic phoneme but requires further examination.

between Manichaeism and Buddhism. As a result of this, Tocharian Buddhism and Tocharian culture were suppressed by the Manichaean Church, and all the financial resources used to carry out Buddhist activities fell into the hands of the Manichaean Uyghurs and the Manichaean Church. In addition, due to the overt prestige of Uyghur, the TochB language and the Brahmi script could not be used for either administrative or economic functions in the Uyghur era after 866. Nevertheless, Tocharian Buddhist culture and TochB as a language with covert prestige survived the suppression of Manicheans and infiltrated the Uyghur ruling class nearly a century later, in the second half of the tenth century. When Tocharian and Uyghur Buddhists felt secure in their power around the turn of the eleventh century, they began to destroy Manichaean places of worship, erecting Buddhist temples in their place. The same would be repeated in the Karakhanid Turkic period as well.

Just at this time, when the Tocharian Buddhist culture and TochB were starting to regain strength and influence with the Uyghurs around the turn of the eleventh century, a third and final wave came from the west: the Karakhanid Turks, who brought Islam with them. This new situation affected only the Western Tocharians and not the Eastern Tocharians because Karakhanid expansion did not affect the regions east of Kucha, the eastern half of the Tarim Basin.

In the second half of the tenth century, the Karakhanid Turks started to expand their territories and spread Islam to the east. From that point on, the western territories of the Tarim Basin, east of Kashgar up to Kucha, where the TochB people lived under Uyghur rule, gradually came under the domination of the Karakhanid Turks. By the middle of the eleventh century, all TochB people in the western Tocharian language area, including Kucha, were under the rule of Karakhanid Turks. Just as the Manichaeans and Buddhists destroyed each other's temples in 762 and around the turn of the eleventh century, the Karakhanids seem to have destroyed Buddhist (and probably also Manichaean) temples during their expansion in the first half of the eleventh century, which must have had a negative impact on the Tocharians. Kashgari, the late-eleventh-century Karakhanid Turkic linguist, provides a quatrain that describes Karakhanid raids on Buddhist Uyghurs: "*We came down on them like a flood / We went out among their cities / We tore down the idol-temples / We defecated on the idols.*"¹²⁵ This probably had a domino effect on all Buddhist activities, including the production and copying of

¹²⁵ See Dankoff / Kelly 1982–1985: 270 (Volume I); Clauson 1972: 360–361.

Buddhist manuscripts. Financial support from businessmen, merchants, local rulers, and elites may also have been drastically reduced or even stopped in time, because it was no longer advantageous to support the Buddhist activities of Tocharians or Uyghurs in the new socio-economic and socio-political environment. As a result, merchants, local rulers, and elites (except for Tocharian and Uyghur Buddhist clergy)¹²⁶ may have validated themselves in this new socio-economic and socio-political environment by adopting Islam. Thus, it is very likely that, when the landed gentry, elites, merchants, and local rulers started supporting Islam and not Buddhism, the sources of income for Buddhism gradually disappeared, along with the Tocharian-Uyghur Buddhist institutions in the western part of the Tarim Basin as well. Consequently, the support system for western Tocharian culture must have been first to cease to exist. The new situation brought about by Islam would then have caused a new political, social, and economic reorganization in western Tocharian society during the late eleventh and twelfth centuries. The consequences of these reorganizations will be discussed in the next chapters.

On the other hand, as Y. Bregel points out, Islamization in the territory of the Karakhanid Khaganate “was a long process, which affected first of all the urban population, while in rural areas some old pre-Islamic cults and practices survived for several centuries longer.”¹²⁷ This undoubtedly also applies to Kucha and its surroundings, as well as the rural areas in the western half of the Tarim Basin. Given that Kucha was conquered by the Karakhanids by the middle of the eleventh century, we can by no means assume that the Buddhist Tocharians in Kucha, a stronghold of Tocharian Buddhism, immediately converted to Islam and had fully adapted to the local Islamic and Turkic population culturally and linguistically by the end of the eleventh century. The case of the Khotanese in the southwestern part of the Tarim Basin also speaks to relatively long-lasting processes of cultural change and language shift. Although Islam began to spread to these regions in the early eleventh century, Kashari reported at the end of the eleventh century that the Khotanese in Hotan, a Middle Iranian-speaking people with a relatively small population in the Karakhanid Khaganate, had “*both a script and*

¹²⁶ It is not certain, but it is very likely that a significant part of the Tocharian and Uyghur Buddhist clergy migrated to the east of Kucha and eastern Tocharian areas (e.g., Beshbalik, Kocho, Karashahr, etc.), since the Karakhanid Turk and Islamic expansion did not affect those areas.

¹²⁷ Bregel 2003: 18.

*a language of their own.*¹²⁸ The fact that they still used their own script, that is, the Brahmi script, clearly indicates that the Khotanese were not Islamized and were still maintaining their language and Buddhist culture. Taking all possibilities into account, I assume that the language shift process of the Khotanese may have been complete sometime between the second half of the twelfth century and the first half of the thirteenth century. The Khotanese language was extinct by the second half of the thirteenth century at the latest, unless it survived for some time in rural areas.

We are in a very fortunate position because we have clear textual and chronological evidence that not only the Khotanese language but also the Western Tocharian language still existed in the eleventh century. The Tocharologist K. T. Schmidt was able to quite precisely date some economic and administrative texts from Kucha to the tenth and eleventh centuries, the chronological assignment of which, according to Schmidt, was previously unclear. He dates one of them (i.e., SI B Toch 11) to the end of March or the beginning of April of the year 1020.¹²⁹ According to him, these texts from the tenth and eleventh centuries are conspicuous in that they show a lack of knowledge of Tocharian, which is reflected in violations of Western Tocharian grammar, such as a lack of congruence between subject and finite verbal form or incorrect hyphenation.¹³⁰ This finding, according to Schmidt, suggests that “the writers of these texts were either Tocharians, who spoke their mother tongue only inadequately, or, which is probably more likely, Turks, who used the western Tocharian language for their correspondence despite their insufficient knowledge of Tocharian.”¹³¹ This text was among the five secular documents previously published by G.-J. Pinault. The general remarks made by Pinault about the language of those texts are also similar to Schmidt’s. Pinault observes, “the language they are written in is not the correct literary language of non-secular texts, but a lower form of TochB, with many forms close to the spoken everyday language of that period.”¹³²

¹²⁸ Dankoff / Kelly 1982–1985: 83 (Volume I).

¹²⁹ As we saw above, the Western Tocharians were not yet under the rule of the Karakhanid Turks at this time.

¹³⁰ Not only for Tocharian but also for language shift and language death research, it would be very useful to know what other violations of the Western Tocharian grammar are present in this text and to what extent.

¹³¹ Schmidt 2001: 160–161.

¹³² Pinault 1998: 3, 8–11.

Schmidt's findings are important and interesting, but I do not agree that this Tocharian text was written by the "Turks" (i.e., Uyghurs). The main reason Schmidt thinks so is the general opinion that the Tocharian was extinct in the eighth century. However, the following questions arise: (1) From whom, how, and for what purpose did the Uyghurs learn the Tocharian language, if it was, as generally accepted, extinct at about 800? (2) Why did they use Tocharian and not Uyghur in a monastery business document concerning small livestock? (3) If this language is a lower form of TochB, with many forms close to the spoken everyday language, then from whom did the Uyghurs learn this spoken Tocharian language? From the perspective of Turkic historical linguistics, Schmidt's argument does not seem plausible at all.

In my opinion, it is quite clear that the text in question was written by the speakers of the declining Western Tocharian language and not the Uyghurs. The text is, at the same time, clear evidence that Western Tocharian was not an extinct language but was in a declining stage in the first half of the eleventh century, and also proof that West Tocharian was still the first language (L1) for the Tocharian society. The fact that it was a form of TochB similar to the spoken everyday language points to this. The fact, however, that the language of the text shows a lack of knowledge of Tocharian, violations of the Western Tocharian grammar, lack of congruence between subject and finite verbal form, and incorrect hyphenation is a clear sign that the Western Tocharian began to lose its character as a result of contact with Uyghur, i.e., Turkic. These are, therefore, important data, especially for researchers of bilingualism, language contact, language shift, and language death. The appearance of the first three properties in Western Tocharian seems to be due to language attrition and not internally motivated, and language attrition is a contact-induced change. The lack of congruence between subject and finite verbal forms also seems to be typical of Uyghur interference. This particularity confirms Schmidt's chronological observation that the text is quite late, that is, from the first half of the eleventh century, as this kind of interference could not have happened before the tenth century. I think the language of the text in question shows violations of the Western Tocharian grammar because, as S. G. Thomason remarks, "dying languages notoriously display a continuum of more and less lexical and structural deviation from the language state before the beginning of the slide toward death."¹³³ On the other hand, as is known,

¹³³ Thomason 2001: 227.

agrammatism is a typical phenomenon in language decay and language death, and in some cases, in these processes “agreement rules cease operating” as well, as H.-J. Sasse notes.¹³⁴ Agrammatism, internally inconsistent productions, and lexical and agreement mistakes can also be found in the dying language Mani, spoken in Guinea and Sierra Leone, because speakers of it have shifted to other languages.¹³⁵ Thus, the agrammatism of the Tocharian text in question is, in my opinion, not due to a Uyghur scribe but to the decline of Tocharian, and the Tocharian text actually shows the traces of the gradual shift from Western Tocharian to Uyghur at about 1020.

However, it is interesting that there is no sign of Uyghur lexical influence in the text in question. Of course, such a conclusion cannot be reached on the basis of a single text, but it is still a sign that Uyghur lexical influence was not yet strong. It may be that the attrition of the Western Tocharian language was not yet severe because the Tocharian Buddhist culture was still in a prestigious position for the Buddhist Uyghurs at that time, and thus the former cultural practices of Western Tocharians had not yet disappeared. Consequently, it was not yet necessary to replace the lexicon (or a part of it) with that of the Uyghurs. As a matter of fact, as Thomason remarks, “lexicon is lost when a language is excluded from domains where it used to be employed, such as religion. Lexicon is also lost when assimilation eliminates former cultural practices in the dying language’s speech community.”¹³⁶ Since Western Tocharian was seemingly not yet excluded from the domain of religion, and the Tocharians had not yet converted to Islam in the first half of the eleventh century, the former cultural practices were not yet eliminated in Tocharian society. As a result, the Uyghur lexicon could not penetrate that domain, possibly explaining the absence of lexical interference from Uyghur in this example. In contrast, Tocharian strongly influenced Old Uyghur religion culturally and linguistically; thus there is significant Buddhist Tocharian lexical influence on Old Uyghur from this time. Tocharian exerted not only lexical but also structural influence on Old Uyghur, though that is beyond the scope of this study.

Considering that the language of the text in question is “a lower form of TochB, with many forms close to the spoken everyday language of that period,” as Pinault notes, I assume as a working hypothesis,

¹³⁴ Sasse 1992: 71.

¹³⁵ Childs 2009: 113–126.

¹³⁶ Thomason 2001: 228.

that Western Tocharian was still used throughout society and that intergenerational language transmission might still have been operating around 1020. That is, it was endangered but was not yet in its final stage of dying, an assessment which is supported by the report of Kashgari about the Tocharians in the Turfan Uyghur Kingdom. Before discussing that, it is worth quoting here a Chinese record that confirms that the Tocharians still existed in and around Kucha around 1020. A record from 1010 of the *Songshi* 'History of the Song' states, "*Kucha is in principle a particular species of Uyghurs.*"¹³⁷ Back to Kashgari's report from 1074/1077, as we will see in detail in chapter 9, "Bilingualism," he reports that "*the Uyghur have a pure Turkic language, and also another language which they speak among themselves.*"¹³⁸ This is clear evidence of bilingualism, but in my opinion, the bilinguals were actually Tocharians, not Uyghurs, since there was no situation that required the Uyghurs to be bilingual in their own kingdom in the eastern part of the Tarim Basin next to the Karakhanid Turks. Taking this information from Kashgari, we can say with certainty that the TochB speakers were still bilingual around 1074/1077 as well. They communicated with each other in Tocharian and with the outside world in the Uyghur language, which had overt prestige at that time. Regarding the speed of the language's decline, it is also worth noting that the Western Tocharian in the western half of the Tarim Basin (i.e., in the Karakhanid Khaganate) reached this stage in about 154 years (from 866 to 1020) and the eastern groups of TochB in the eastern part of the Tarim Basin (i.e., in the Uyghur Kingdom) in about 208 years (from 866 to 1074/1077).¹³⁹ In other words, even after more than two hundred years, the TochB society still had not completed the language shift process. The language area of TochB actually encompassed the eastern part of the Tarim Basin, but the western half of this language area belonged to the Karakhanids, while the eastern half remained under Uyghur rule. Because of this, the Tocharian society and the language area of TochB were split in two from about the middle of the eleventh century on.

As for the "incorrect hyphenation" in the text in question, unlike K. T. Schmidt, I do not think it is due to a Uyghur scribe. As has been established, the literature and writing traditions of the Tocharians

¹³⁷ Lévi 1913: 373, 375; cf. Schmidt 2001: 160.

¹³⁸ Dankoff / Kelly 1982–1985: 83 (Volume I).

¹³⁹ This will be reliable reference information for us in the evaluation of language shift phenomena in the Eurasian steppe zone.

practically ceased after the eighth century. Along with them, knowledge of the norms and proficiency in writing may also have disappeared, leading to inadequate literacy. Moreover, the text reflects a lower form, the spoken everyday language of that period, which was not standardized and which was likely undergoing attrition. Thus, I assume the appearance of incorrect hyphenation is due to this language loss and not to a Uyghur scribe. The same factors may have played a role in two bilingual (TochB-OUyg.) fragments as well, in which, according to the publishers,¹⁴⁰ there are many "misspellings" regarding the TochB words. It may be useful to re-evaluate these two bilingual fragments from this perspective of gradual language loss through attrition. The same factors may apply to the word forms in the "Manichaean Pothi-book" bilingual (i.e., TochB-OUyg.) Manichaean script.¹⁴¹

Thus, as with the Khotanese, the processes of cultural change (i.e., Islamization), language shift, and the Turkization of the TochB people in the western half of the Tarim Basin, including Kucha, must have taken a relatively long time. Even assuming a three-generation duration, the processes of cultural change and ethnic fusion, especially the process of language shift, would probably not have been completed before the middle of the twelfth century. Even if we do not know when the language shift process ended in the case of the Western Tocharians, one thing is very certain: the Western Tocharians still existed in the twelfth century and retained their societal and ethnic separateness, as we already saw above. This may be the reason that Mubarakshah wrote in his work from 1193–1206 that *Twyr'k* (= *Tugrak*), that is, the TochB people, was a tribe of the Karakhanid Turks.¹⁴² As we saw above, *Twyr'k* was

¹⁴⁰ Peyrot / Pinault / Wilkens 2019.

¹⁴¹ Its chronology is quite controversial (see Knüppel 2010, Knüppel 2011). There are also some other Tocharian-Uyghur bilingual manuscripts. Most are very small fragments and are not dated. Only two of them are TochA-OUyg.; all others are TochB-OUyg.: (1) The "Manichaean Pothi-book" = TochB-OUyg. (Gabain / Winter 1958; for further literature, see Clark 2013 and Knüppel 2010: 384, note 2; see also *Man.Bil.* and *He* in Malzahn 2007a: 83); (2) *IOL Toch 81* = TochA or TochB-OUyg. (Maue 2008); (3) *THT 1651*, *THT 1095* = TochA-OUyg. (Maue 2010); (4) *U 5207*, *U 5208*, *U 6855*, *THT 1405 d* = TochB-OUyg. (Maue 2015; Peyrot / Pinault / Wilkens 2019); (5) *SI 3752* = TochB-OUyg. (Lundysheva / Maue / Wille 2021); (6) *SI 3715/1*, *SI 3716/4*, *SI 3716/5-6*, *SI 3717/1* (Kr VII/1), *SI 3718* (Kr VII/1), *SI 3754* (Kr VIII/6-3) = TochB-OUyg. (Lundysheva / Maue / Wille 2021); see also Maue 2015: 499, note 5.

¹⁴² Aydemir 2009: 162 ff.; Mubarakshah's work is fragmented and was edited by E. Denison Ross (Ross 1922: 408). Mubarakshah, of course, does not specify anything about the language or origin of the Tugrak tribe. He only gives a list of the Karakhanid Turk tribes.

one of the “Four Tugrak” (tribal union, i.e., *ctß'r twyr'k*) in the Sogdian part of the Karabalgasun inscription (early ninth century). Since the *ctß'r twyr'k* was the designation of the tribal union of the Western Tocharians, it is clear that *Tugrak* in Mubarakshah's work from the end of the twelfth century denotes the Western Tocharians. This provides definite textual and chronological evidence that the Western Tocharians still existed in the twelfth century. If the *Argu*, the descendants of *Yuezhi* (i.e., *(Y)arki*), still maintained their language after the second century BCE in the southwest of the Ili Valley, and in the time of Kasgari (at the end of the eleventh century) they were not only bilingual but retained a separate social and ethnic identity, then it is not so surprising that the Western Tocharians called *Tugrak* (i.e., *ctß'r twyr'k* ‘The Four Tugrak’) also retained a separate social and ethnic identity in the twelfth century. The reason their names appear very rarely in historical sources can be explained by the phenomenon of the *shadow effect* mentioned above. In other words, throughout their history, they were always under the rule of different political entities and were therefore very rarely visible.

The preservation of their ethnic separateness definitely indicates that cultural and ethnic fusion with Karakhanid Turks had not yet been completed in the twelfth century. So I tentatively assume that their language shift process was probably not completed either, and that they may have still been in the last phase of this process at the end of the thirteenth century, when Mubarakshah wrote his genealogical work on the Karachanid Turks and their tribes, beginning in 1193 and finishing in 1206. The data from Mubarakshah seem to be the last on Western Tocharians in historical sources. I could not find further data on them in thirteenth-century sources. Of course, this may be due to the shadow effect, as well as their complete Turkization by that time. Therefore, I tentatively assume that their cultural and ethnic fusion with Karakhanid Turks was complete by the thirteenth century. It is very difficult to believe that they could maintain their ethnic identity and ethnic separateness for a long time after they became Islamized. Taking all possibilities into account, I therefore assume that the Western Tocharians in the western half of the Tarim Basin, including Kucha, had largely abandoned the western variety of TochB sometime in the twelfth century, but that it was not fully extinct until sometime in the thirteenth century. However, the language shift of the Western and Eastern Tocharians probably took place at different times: first among the Western Tocharians, then among the Eastern Tocharians. This is because the areas in the eastern half of the Tarim Basin (that is, east of Kucha, including Karashahr, Kocho, Beshbalik, etc.) were not yet Islamized in the twelfth century; the majority only became

Islamized after the Mongol epoch, in the fourteenth–fifteenth centuries. In short, it seems likely that the language shift process of the Eastern Tocharians intensified during the second half of the twelfth century and the first half of the thirteenth century and was completed at the end of the thirteenth century. We will return to the problem of the Eastern Tocharians below.

5. CULTURAL CHANGE

“Cultural change,” “cultural transformation,” or “cultural assimilation” are terms generally applied to the same phenomenon in language shift or language death research. This is one of the most important factors leading to language shift and cultural assimilation in the Eurasian steppe zone. It occurred, for example, in (1) the case of the Ogur Turks of the First Bulgarian Empire (seventh–eleventh centuries, *Turkic* → *Slavic*), (2) the Turkic-Mongolic ruling class of the Tuoba-Wei Dynasty in northern China (386–535, *Turkic-Mongolic* → *Chinese*), (3) the Sekel Turks (eleventh–thirteenth centuries, *Sekel Turkic* → *Hungarian*), (4) the Kuman-Kipchak Turks (thirteenth–sixteenth centuries, *Kuman-Kipchak Turkic* → *Hungarian*, and *Kuman-Kipchak Turkic* → *Rumanian*), and (5) the ruling class of the Golden Horde (fourteenth–sixteenth centuries, *Mongolic* → *Turkic*), among others. These and some other steppe peoples assimilated ethnically and linguistically as a result of cultural assimilation caused by religious conversion. The same happened in the case of Western Tocharians as well.

D. Crystal defines the concept of “cultural assimilation” in terms of language death as follows: “One culture is influenced by a more dominant culture, and begins to lose its character as a result of its members adopting new behaviour and mores.” He adds that this can happen due to a demographic submersion, as in the course of colonialism, an initial military superiority, or economic reasons. Whatever the case, “language quickly becomes an emblem of that dominance, typically taking the form of a standard or official language associated with the incoming nation.”¹⁴³

These three factors can also be observed in the case of the cultural assimilation of the Western Tocharians in both the western and eastern parts of the Tarim Basin. The economic reasons and initial military superiority were already mentioned above (see Event 1). As for demographic submersion, not only in the Tarim Basin but also in other regions, “where there were Turks in large numbers ... and Turks

¹⁴³ Crystal 2000: 87–88.

comprised the ruling elite, Turkicization followed.”¹⁴⁴ But as Y. Bregel also noted, the process of Turkization of Central Asia under the Karakhanids is impossible to evaluate on the basis of available sources. He adds that “a general assumption is that the population of Eastern Turkestan in the Qarakhanid period was already overwhelmingly Turkic-speaking, and Turkic was not only vernacular but also the language of high culture.”¹⁴⁵

Regarding this problem, we are in a fortunate position, because Mubarakshah, the late twelfth-century Karakhanid historian, describes the situation well: “*One is that, after the Persian language, none is finer and more dignified than Turkish. And now-a-days, the Turkish language is more popular than it was ever before. This is due to the fact that the majority of Amirs and Commanders are Turks. And it is the Turks who are most successful and most wealthy; and so all have need of that language. And the highest nobles are in the service of the Turks under whom they enjoy peace, prosperity and honour...*”¹⁴⁶ These notes of Mubarakshah clearly show that Karakhanids and Karakhanid Turkic were in a prestige situation, which is one of the most important triggers of language shift.

As for the “highest nobles in the service of the Turks” mentioned by Mubarakshah, this information matches well with the statement of historian P. Golden, who notes that the “political elites of the Islamic lands, both those of the Islamic heartlands as well as those of the periphery, had become Turkic.”¹⁴⁷ The note by Mubarakshah indicates that Karakhanid Turkic as a prestige language may have first begun to spread from the top down among the Western Tocharian nobility and elites, who were in close contact with local Turkish commanders and rulers and were also in the service of the Turks. Or at least, that might have been the case in the beginning. After that, language shift probably followed the usual route, which we shall discuss briefly in the “*Bilingualism*” chapter below.

When the Western Tocharians, like other non-Turkic peoples (Khotanese, Sogdians, Argu, Kenchek, etc.) within the Karakhanid Khaganate, began to convert to Islam over time, Islam eliminated Buddhism and other cultural practices in Western Tocharian society first. Thus, the cultural and

¹⁴⁴ Golden 1992: 229.

¹⁴⁵ Bregel 2003: 28.

¹⁴⁶ Ross 1922: 405.

¹⁴⁷ Golden 1992: 229; see also Elverskog 2010: 50.

religious superiority of the Tocharians ended, and this new situation reversed the prestige relations between the Tocharians and the Turks, as well as the Uyghurs. In other words, after converting to Buddhism, the Uyghurs were strongly influenced by the prestigious Tocharian culture and language. The same thing happened to the Tocharians later, when they were strongly influenced by the prestigious Karakhanid culture and language after converting to Islam. Before the spread of Islam in the Tarim Basin, the cultural influence was in the direction of «*Tocharian* → *Turkic* / *Uyghur*». After the spread of Islam, the cultural influence reversed: «*Tocharian* ← *Turkic* / *Uyghur*». This process seems to have taken a relatively long time—more than a century—because the aforementioned note by Mubarakshah (regarding *Twyr'k*) clearly indicates that the cultural and ethnic fusion of the Western Tocharians with the Karakhanid Turks had not yet been completed in the twelfth century. If this is the case, then we have to assume that Western Tocharians had long-term bilingualism and a long-term process of Islamization. Since they no longer had a strong sense of Buddhist cultural or religious identity but had the same cultural or religious identity as the Turks or Uyghurs, the number of exogamous marriages of Tocharians to Turks and Tocharians to Uyghurs probably increased gradually. This must have sped up the language shift process for Western Tocharians even more.

In such a process, as predicted by researchers, the first “lexicon is lost when a language is excluded from domains where it used to be employed, such as religion. Lexicon is also lost when assimilation eliminates former cultural practices in the dying language’s speech community.”¹⁴⁸ This must have been the case in Western Tocharian too. As a result, as in other cases, traditional cultural and linguistic dependencies were broken over time, traditional knowledge and practices were rapidly eroded, and eventually cultural homogenization took place.¹⁴⁹ Thus, the Western Tocharians first shifted to the culture of the Karakhanids, then to Islam, and then to the Karakhanid language. As a result, the Tocharians lost not only their linguistic identity but also their cultural identity, religious identity, social identity, and ethnic identity. Islam not only eliminated cultural differences inside the

¹⁴⁸ Sasse 1992: 19; Thomason 2001: 228.

¹⁴⁹ Crystal 2000: 85, 89.

Karakhanid Khaganate but, as V. V. Barthold noted, aided the process of Turkization by neutralizing ethnic differences as well.¹⁵⁰

6. SOCIAL CHANGE¹⁵¹

Social change is a significant intermediate stage of language shift in the steppe zone of Central Asia. Social change in the historical context of the Central Asian steppe is a very complex phenomenon, and it is not always possible to pinpoint its causes due to the lack of historical data. According to my preliminary investigation there are two common trajectories: (1) *military-political restructuring* → *social change* → *language shift*, and (2) *cultural change* → *social change* → *language shift*. From the available historical data, the second phenomenon occurred in western Tocharian society. In the first case, the direction of cultural influence is always top-down. In the latter case, it is not always possible to determine the direction of the influence. It can be top-down or bottom-up. However, in the case of the Tocharians, it seems that this cultural (and linguistic) influence occurred top-down. Mubarakshah's note on Karakhanids from the late twelfth century (discussed in the previous chapter) indicates this: "*And the highest nobles are in the service of the Turks under whom they enjoy peace, prosperity and honour...*"¹⁵² In all likelihood, the influence of the Karakhanid Turkic language and culture could have been through the "*highest nobles*" and local rulers of the western Tocharians. They were probably the first to convert to Islam, and Karakhanid Turkic must have started to spread as a prestige language through nobles and local rules toward lower social groups. The second fact that points to this is the social structure and provincial organization of the Karakhanid Khaganate. Namely, "the Karakhanid people, a society where tribes lived under the protection of their own lords, maintained their loyalty to

¹⁵⁰ Golden 1992: 229.

¹⁵¹ As I mentioned above, as a result of the Karakhanid conquest, the Tocharian language area was divided into two: the western half of the Tocharians came under the rule of the Karakhanids, and the eastern half continued to remain under the rule of the Uyghurs. In this chapter, however, I limit my analysis only to the western Tocharians in the Karakhanid Khaganate since I could not find any data about the social change or social structure of the Tocharians in the Uyghur Kingdom.

¹⁵² Ross 1922: 405.

the state through their lords."¹⁵³ This fact also supports Mubarakshah's statement and indicates that the Tocharians lived under the protection of their own lords. This is also evidenced by the fact that, according to Mubarakshah, *Tugrak* 'Tocharian' was one of the tribes of Karakhanids, as mentioned above. Since Mubarakshah's report is from the late twelfth century, it seems certain that the western Tocharian people were first reorganized according to the structure of the Karakhanid tribal and provincial organization in the second half of the eleventh century and preserved this social and tribal structure even in the twelfth century. This is due to the Tocharian society's position on the periphery of the Karakhanids, potentially causing social changes to affect them more slowly compared to the central areas in the west. I think this is the main reason why they still existed as a separate tribe in the twelfth century. Accordingly, the language shift process must also have been relatively slow.

Karakhanid Islamic culture undoubtedly began to increasingly influence Tocharian society over time. Exogamous marriages must also have increased gradually as the highest nobles and local rulers of the western Tocharians converted to Islam over time. As a matter of fact, exogamous marriages play a very important role in language shift. As the number of such marriages with people from prestigious cultures increases, social change and language shift begin to accelerate. This was undoubtedly the case with the Tocharians as well, with social change accelerated by exogamous marriages and conversions to Islam. Based on the data from Mubarakshah mentioned above, it appears that this process of social change was not yet completed in the twelfth century, and we have no data on when it was. However, it seems very likely that this process ended sometime in the thirteenth century.

7. LOSS OF CULTURAL PRESTIGE

The western Tocharians were under Uyghur rule before falling under Karakhanid rule. Starting in the second half of the tenth century, Tocharian Buddhism significantly influenced the Uyghurs culturally and linguistically. This indicates that although the Tocharians were under Uyghur dominance, they enjoyed cultural and linguistic prestige in the late tenth century and the first half of the eleventh century, as they were the most important representatives of Buddhism in the Tarim Basin. In other words, Tocharians had cultural dominance, and, thus, the cultural influence was in the direction of

¹⁵³ Okudan 2019: 147.

Tocharian → *Uyghur*. However, when the Tocharian language area was divided due to the Karakhanid conquest in the mid-eleventh century and the western Tocharians came under Karakhanid rule, this cultural dominance ended in the western Tocharian region. The Tocharians under Uyghur rule continued their cultural dominance during the eleventh century. We do not know how long the western Tocharians under Karakhanid rule preserved the Buddhist culture, but it is clear that, once Islam gained prestige in the Karakhanid lands, Buddhist culture receded into the background and lost its prestige. As Islam gradually eliminated social and cultural differences, the Buddhist cultural ties of the Tocharians began to break down, and along with them, their social institutions also began to fade. This process finally resulted in first a loss of cultural prestige and then a loss of linguistic prestige, which we will see in the next section. Thus, first the cultural dominance of the western Tocharians ended, and then the Buddhist culture, which was the source of cultural prestige, began to gradually disappear.

8. LOSS OF LINGUISTIC PRESTIGE

As the ties of the Tocharians with the Buddhist culture were broken and Buddhism began to gradually disappear over time, the Tocharian language, the most important carrier of the culture, also began to lose its importance and prestige. In western Tocharian society, Karakhanid Turkic, which had overt prestige, must have been used more and more from the mid-eleventh century on, and western Tocharian, with its covert prestige, must have been used less and less. With the newer generations, proficiency in the prestige language increased. As a result, in the western half of the Tarim Basin the cultural and linguistic influence that took place before Islamization in the direction of *Tocharian* → *Uyghur* took place after Islamization in the opposite direction, *Karakhanid Turkic* → *Tocharian*.

The Western Tocharian-speaking groups lived, however, not only in the western half of the Tarim Basin but also in the eastern half. In the eastern Tarim Basin, some groups of the western Tocharians continued to practice Buddhism, because Islam did not reach those regions. They therefore seem to have kept the TochB language until the middle of the thirteenth century, even though Uyghur was the prestige language. This was because the Uyghurs were also Buddhists and had originally learned Buddhism from the Tocharians, meaning that the Uyghurs were only socio-politically dominant, not culturally, and the prestige of the Tocharian culture and the TochB language still partially remained.

The TochB fragment from the territory of the Uyghur Kingdom with the signature THT 296, which is dated by radiocarbon research to the end of the twelfth century (between 1178 and 1255), clearly refers to the fact that TochB (Western Tocharian) was not still extinct in the first half of the thirteenth century in the eastern half of the Tarim Basin. We will return to this issue below.

In other words, while TochB in the western half of the Tarim Basin lost its prestige under the dominance of Islamic Karakhanid culture from the mid-eleventh century on, TochB groups in the eastern half of the Tarim Basin seem to have maintained their linguistic prestige until the thirteenth century, since the Uyghurs were still Buddhists.

9. BILINGUALISM

In the language shift phenomena of the Turkic and Eurasian steppe zones, the stage of bilingualism often follows cultural change or socio-political change, among other stages. In the case of the Tocharians, however, the situation is somewhat complicated. Although their bilingualism emerged first as a result of a socio-political change after 866, because the language area of the Western Tocharian was split in two from about the middle of the eleventh century on, the languages of the two split Tocharian groups followed two different language shift processes. The bilingualism of the TochB groups in the east under Uyghur rule continued to follow the normal course toward language death. The TochB people in the west, who came under Karakhanid rule and were previously in the *TochB-Uyghur* bilingualism process, entered a new bilingualism (*TochB-Karakhanid*) process as they were exposed to cultural change starting in the second half of the eleventh century. Below, I will briefly discuss the bilingualism processes of both groups in light of available historical data.

As for the latter group, under Karakhanid rule, the TochB manuscript mentioned above (i.e., SI B Toch 11) and dated by Schmidt to 1020 clearly shows that TochB was still a spoken everyday language and the western Tocharians were still retaining competence in it at that time. Two key facts from Kashgari support this: (1) As we will see below, Kashgari mentions that in the last quarter of the eleventh century, Uyghurs were bilingual and spoke another language among themselves. But the bilinguals were undoubtedly Tocharians, not Uyghurs. In other words, Tocharians spoke their heritage language (L1) among themselves and Uyghur to the outside world. They were actually bilinguals with TochB

dominance. (2) Kashgari also reports that around the same time, the Argu community was bilingual (i.e., TochA and Karakhanid). This clearly means that the Argu community preserved TochA as an L1. Due to the lack of historical data, we do not know what phase of language shift the Argu or TochB societies were in during the twelfth century, but if we take Batibo's classification into account,¹⁵⁴ we can say that they went through the following phases: Phase II: *bilingualism with L1 predominance* (TochB/Argu-Karakhanid) → Phase III: *bilingualism with L2 predominance* (Karakhanid-TochB/Argu) → Phase IV: *restricted use or competence in L1* (Karakhanid-TochB/Argu) → Phase V: *L1 as substratum* (i.e., the death of the L1 = TochB/Argu).

Based on this, I suppose that the western Tocharians were still in "Phase II: *bilingualism with L1 predominance*" in about 1020. Since this TochB community came under Karakhanid rule after 1040 and, thus, the TochB-Karakhanid language relationship started after this date, I propose that the TochB community maintained its competence in TochB in the first half of the twelfth century, or maybe even longer. Mubarakshah's mention of *Tugrak* 'Tocharian' as a Karakhanid tribe at the end of the twelfth century, which indicates the societal separateness of TochB society in the twelfth century, supports this as well. Taking everything into account, I assume that TochB under Karakhanid rule was abandoned at the end of the twelfth century or in the first half of the thirteenth century and very likely went extinct sometime in the thirteenth century. The same probably goes for Argu too.¹⁵⁵

As for the bilingualism of the TochB groups in the east under Uyghur rule, we are in a fortunate position, because Kashgari (1074/1077 CE) reports in the last quarter of the eleventh century that "*The Uyghur have a pure Turkic language, and also another language which they speak among themselves.*"¹⁵⁶ This is clear evidence of societal bilingualism and code alternation. Since Kashgari meant all the Uyghurs in the Uyghur Kingdom, not just some of them, this bilingualism must have spread throughout the Uyghur-speaking area. The bilingualism cannot be attributed to settled Iranian peoples such as the

¹⁵⁴ Batibo 1992: 79–92.

¹⁵⁵ The Karakhanid lands, together with many Karakhanid tribes, came under the rule of the Chagatai Khanate of Mongolic origin in the thirteenth and fourteenth centuries. We do not know whether the TochB (i.e., *Tugrak*) and Argu groups still existed during the Chagatai period. To understand this, it would be necessary to conduct a study on the Chagatai tribes.

¹⁵⁶ Dankoff / Kelly 1982–1985: 83 (Volume I).

Khotanians and Sogdians, since the Sogdians only had small trading colonies in these areas, and the Khotanese were not around there at all. There was only one subordinate people, the Tocharians, who lived throughout the entire Uyghur language area and were as numerous as the Uyghurs, perhaps even more numerous. This conclusion should not be surprising. If the bilingual Argu, the successors of the Yuezhi, could still preserve their first language, TochA, under Karakhanid rule even in the last quarter of the eleventh century, why would we think that the TochB community under Uyghur rule could not maintain its language? Moreover, while Argu's contact with Turkic continued uninterrupted from the end of the fourth century onward, the contact of the TochB community with the Uyghurs began only in the second half of the ninth century, after 866. In short, it was not the Uyghurs who were actually bilingual but the TochB community, which had been under Uyghur dominance since the second half of the ninth century and therefore used Uyghur as a second language. They communicated with each other in TochB, which had covert prestige, and with the outside world in the Uyghur language, which had overt prestige at that time.

Consequently, the state that Kashgari describes about the bilingualism of the Tocharians (i.e., Uyghurs) at the end of the eleventh century seems to correspond to "Phase II: *bilingualism with L1 predominance*" in Batibo's classification above. The same situation (i.e., Phase II) can also be observed in the case of Tanzanian languages. Namely, according to Batibo, "this is the phase in which the majority of Tanzanian ethnic groups are presumed to be. They use their ethnic languages in all family, village, and intraethnic activities, but use another language as a language of wider or specific communication."¹⁵⁷ If we consider that the TochB manuscript dated by Schmidt to 1020 (SI B Toch 11) shows that TochB was a spoken everyday language in the first half of the eleventh century, and the TochB community was still retaining competence in it at that time, then it is not surprising at all that the same TochB community was still bilingual (TochB–Uyghur) and TochB-dominant in the second half of the eleventh century as well. This bilingual state of the TochB community seems to have lasted until the thirteenth century and reached "Phase IV: *restricted use or competence in L1*" in Batibo's classification. This conclusion is based on a TochB fragment (THT 296) from the territory of the Uyghur

¹⁵⁷ Batibo 1992: 90.

Kingdom dated by radiocarbon research to the end of the twelfth century (between 1178 and 1255), which in my opinion clearly depicts this state of language. This will be discussed in the next chapter.

10. LANGUAGE LOSS

Language loss, one of the intermediate stages of the gradual shift to the dominant language in language-contact situations, refers to a gradual decline in first language proficiency, first at the individual level and then at the societal level. This is the stage when children of the non-dominant language can still learn it as an L1, even if to a limited extent. That is, intergenerational language transmission still operates to some extent. With each new generation, however, the level of proficiency in L1 decreases.

It is “an intermediate stage of bilingualism in which the dominant language comes to be employed by an ever-increasing number of individuals in a growing number of contexts where the subordinate language was formerly used.”¹⁵⁸ It is also known as language attrition. “This category is by far the most common linguistic route to language death.... Attrition is a gradual process in which a language recedes as it loses speakers, domains, and ultimately structure.”¹⁵⁹ Structurally, it “is most often characterized by reductions and losses in the phonological, morphological, syntactic, and lexical subsystems.”¹⁶⁰ In this stage of gradual language shift, intergenerational transmission of the language begins to fail and cannot be carried out effectively since it is used less and less throughout the non-dominant community. And, as Thomason notes, “at the final stage, if the minority language continues to fulfill emblematic religious or social functions, knowledge of it will likely be restricted to unanalyzed words and phrases.”¹⁶¹ Other researchers also note that dying languages tend to be restricted to traditional ceremonies, ritual contexts, etc.¹⁶²

I think that these all apply to TochB as well, which, in my opinion, was in the final stage at the

¹⁵⁸ Campbell / Muntzel 1989: 184–185.

¹⁵⁹ Thomason 2001: 227.

¹⁶⁰ Swiggers 2007: 24.

¹⁶¹ Thomason 2001: 226.

¹⁶² Brenzinger / Dimmendaal 1992: 4; Campbell / Muntzel 1989: 185.

end of the twelfth century or in the first half of the thirteenth century. There is a TochB document (THT 296) from Gaochang (i.e., Kocho, Karahoja) which is an eighteen-syllable Buddhist verse dated by radiocarbon research to the end of the twelfth century (between 1180 and 1250 CE).¹⁶³ E. Sieg and W. Siegling noted that its “writing is bad, unclear, and very incorrect.”¹⁶⁴ T. Tamai, who had the document radiocarbon tested in 2004–2005, also thought at the time that he was “not sure whether this manuscript was even written by a Tocharian, as it is very incorrect and shows a style that is untypical for Tocharian manuscripts. In addition, the book form is Uyghur. It is therefore possible that this manuscript was copied by a Uyghur or another non-Tocharian at a very later date.”¹⁶⁵ This is actually the general view among Tocharologists. Thus, because of its “unclear” writing, “incorrect” forms, and “mistakes,” as well as the prevailing opinion that the Tocharian languages had already died out at around 800, Tocharologists claim that this document was written by a Uyghur whose knowledge of TochB was incomplete.

I do not agree with the prevailing view. In my opinion, this document clearly points to two phenomena:

- (1) The “unclear” writing, “incorrect” forms, and “mistakes” seem to correspond to “Phase IV: *restricted use or competence in L1*” in Batibo’s classification above. This is the last phase before the gradual death of a language. Batibo notes that in this phase, in a few speech communities in Tanzania, the functions of L1 have been so reduced that the people use L1 forms only in specific situations like initiation ceremonies, secret rituals, or folkloric performances. These ethnic communities have therefore lost their original competence in L1. Only a few elders, especially women, may still be able to use the linguistic forms as originally used. These communities have also suffered significant “simplification in their phonological system” and a

¹⁶³ Tamai 2005: 1–7; Tamai 2017: 323.

¹⁶⁴ Sieg / Siegling 1953: 187–188. For translations of some of its lines, see: ‘You are skillful as a boatman on the Ganges; I am zealous on the *saṃsāra* lake. Let [me] cross the stream with [your] boat on the Ganges [and] I will pull you out of the *saṃsāra* lake’ (Peyrot 2013: 298). According to Peyrot, this passage also seems to contain a mistake (*ibid.*).

¹⁶⁵ Tamai 2005: 5.

heavy “reduction in their morphology.”¹⁶⁶ “Mistakes” similar to those in the document THT 296 can also be seen in other dying languages, such as Mani. Mani, spoken in Guinea and Sierra Leone, is slowly dying because speakers have shifted to other languages. Mani is used only infrequently and is by a small segment of the population. According to G. T. Childs, the noun class system of Mani “seems in total disarray,” and its “system has fallen into desuetude.” Childs identifies and analyzes the “mistakes” made by Mani semi-speakers over forty with “weak” or “imperfect” linguistic competency. Their competency ranking corresponds to “weak semi-speakers with more restricted speaking competence” in the classification of Campbell and Muntzel.¹⁶⁷ There is also “phonetic erosion” in Mani. Mani speakers produce “forms that are incapable of being analyzed” and must be construed as “mistakes” and the result of the process of language death. As Childs notes, “these mistakes represent the loss of competence and are no doubt directly attributable to the language no longer being used, signaling the death of the language. The noun class system of Mani, then, is in disarray due to the moribund state of the language, which disarray represents a significant challenge to analysis.” The most obvious mistakes in Mani are lexical ones, internally inconsistent productions, pluralization errors, and agreement errors.¹⁶⁸

- (2) The second phenomenon that I think the TochB document points to is that its scribe was a “semi-speaker,” that is, an imperfect speaker. We cannot know for sure, of course, but based on the “unclear” writing, “incorrect” forms, and “mistakes” in the THT 296, his competency ranking probably corresponds to “weak semi-speakers with more restricted speaking competence” in the classification of Campbell and Muntzel.¹⁶⁹ According to H.-J. Sasse, “*semi-speaker* is a member of the post-Language-Transmission break generation with imperfect knowledge of abandoned language,” which is dying out.¹⁷⁰ And according to N. Dorian, “as the language dies,

¹⁶⁶ Batibo 1992: 91.

¹⁶⁷ Campbell / Muntzel 1989: 181.

¹⁶⁸ Childs 2009: 113–126.

¹⁶⁹ Campbell / Muntzel 1989: 181.

¹⁷⁰ Sasse 2012: 18.

a group of imperfect speakers characteristically appears who have not had sufficiently intensive exposure to the home language, or who have been much more intensively exposed to some other language; and if they continue to use the home language at all, they use it in a form that is markedly different from the fluent-speaker norm."¹⁷¹ S. G. Thomason's comment is also very important in this regard and points to the reasons for the mistakes in the TochB document: "Once transmission of the minority language to children is interrupted, the linguistic result is predicted to be a pathological reduction in the speech of 'semi-speakers' (namely, the children who fail to learn the minority language fully). At the final stage, if the minority language continues to fulfill emblematic religious or social functions, knowledge of it will likely be restricted to unanalyzed words and phrases."¹⁷²

Just like the mistakes of Mani semi-speakers mentioned above that become unanalyzable as the result of gradual language death, the "unclear" writing, "incorrect" forms, and "mistakes" Sieg and Siegling noted that the errors in THT 296 should also be interpreted as the result of gradual language death. Thus, just like the semi-speakers in Tanzania, the scribe or copyist of THT 296 was also in "Phase IV: *restricted use or competence in L1*," i.e., a weak semi-speaker with limited competence. Therefore, just as in other dying languages, such as those of Tanzania, Guinea, and Sierra Leone, the functions of TochB at the end of the twelfth century or in the first half of the thirteenth century were so reduced or restricted that the TochB people probably used the language only in specific situations, such as Buddhist ritual contexts. At least, the Buddhist content of THT 296 seems to indicate this. This stage corresponds to the last stage in Sasse's language death model, i.e., "use of residue knowledge for specialized purposes" (e.g., ritual, group identification, etc.).¹⁷³ Accordingly, the TochB community probably no longer used the language in informal situations. Let us remember that they were bilingual in the last quarter of the eleventh century, as Kashgari reports. During the twelfth century, they may have gone into "Phase III: *bilingualism with L2 predominating*" first and then into "Phase IV: *restricted*

¹⁷¹ Dorian 1981: 115.

¹⁷² Thomason 2001: 226.

¹⁷³ Sasse 1992: 19 (Figure 2).

use or competence in L1." Thus, since the community was still Buddhist, we are probably seeing in this document the last effort to maintain the ancient ritual language. Since some communities of dying languages in Tanzania, Guinea, Sierra Leone, or elsewhere include both fluent speakers and semi-speakers, it can also be assumed that, besides the semi-speakers, there were also some fluent speakers remaining in this phase.

Those who think it impossible that the TochB community could have survived in the Uyghur area until the thirteenth century should remember, as mentioned above, that Mubarakshah mentions *Tugrak* 'Tocharian(s)' as one of the Karakhanid tribes, in his work written at the turn of the thirteenth century (1193–1206). And we see the *Tugrak* also in the *ctβ'r twyr'k* 'The Four Tugrak (tribal union)' in the ninth century. As Henning showed at the time, it is beyond dispute that *Tugrak* denotes Tocharians.¹⁷⁴ Thus, both the *Tugrak* tribe of Karahanids at the turn of the thirteenth century and the document THT 296 at the turn of the thirteenth century clearly prove that both in the Karahanida and Uyghur areas, the TochB communities, who once (until the middle of the eleventh century) formed a single community, survived until the thirteenth century.

11. LANGUAGE SHIFT

This is the penultimate stage of a dying language, at which almost all members of a society abandon their non-dominant L1 and shift to the dominant L2. This is actually the endpoint of language loss described above. There, the process of language loss began at the individual and family level and became increasingly widespread; at this stage, it finally reached social dimensions. The entire TochB society shifted to the L2 (Uyghur, Karakhanid), except for some individuals who still know the heritage language. The children of the non-dominant language were no longer learning the dying language of their ancestors. That is, intergenerational language transmission was not operating any longer.

Through this process, TochB communities in the east (Uyghur) and west (Karakhanid) lost their competence in L1, and the knowledge of L1 was so reduced that the people no longer used L1 forms, even in religious practices, secret rituals, initiation ceremonies, folkloric performances, traditional ceremonies, or other ritual contexts. In other words, TochB was no longer used, either in the family

¹⁷⁴ Henning 1978.

circle or in society. Although some semi-speakers and some members of the older generation still did not completely forget TochB, they preferred the Uyghur or Karakhanid languages. The TochB society abandoned its heritage language and shifted to the Uyghur or Karakhanid languages, at which point the process of a gradual language shift has been completed. Taking all various possibilities into account, I propose that this stage took place in the second half of the thirteenth century (cf. THT 296 dated between 1180 and 1250 ce).

12. LANGUAGE DEATH

The last stage of the Tocharian language shift corresponds to "Phase V: *L1 as substratum*" in Batibo's classification. In this stage, by comparison, "in very few Tanzanian ethnic communities, the predominance of L2 has been so high that L1 has been completely replaced by L2. L1 has therefore died."¹⁷⁵ The same situation undoubtedly occurred in the case of TochB as well. When the last person (i.e., the last speaker or semi-speaker) in the older generation who still knew some TochB died, the TochB language died with them.¹⁷⁶ We do not know when this could have happened (in the late thirteenth or early fourteenth centuries?). It seems, however, almost certain that TochB was already extinct in the fourteenth century, as there is no evidence of its survival during that period.

After all this, the usual question remains: "What kind of traces, linguistically or otherwise, does language shift leave behind once the extinction of a particular language has become a fact?"¹⁷⁷ According to Dimmendaal, these traces are of three natures: linguistic, socio-anthropological (i.e., distinct cultural), and physical anthropological.¹⁷⁸

Let us start with the linguistic traces. There is no clear evidence of substrate interference (i.e., lexical or structural) from Tocharian in modern Uyghur or in its dialects. And so far, not a single lexical

¹⁷⁵ Batibo 1992: 92.

¹⁷⁶ I will not go into the theoretical problem of when a language can be considered "dead" or "extinct." Namely, as M. Brenzinger and G. J. Dimmendaal note, "no consensus seems to exist as to when a particular language is to be regarded as dead." (Brenzinger / Dimmendaal 1992: 3).

¹⁷⁷ Dimmendaal 1989: 13.

¹⁷⁸ Dimmendaal 1989: 25.

transfer from Tocharian has been found in modern Uyghur. There may be some reasons for this: (1) We do not know for sure yet if there is substrate interference from Tocharian in local Uyghur dialects, as this issue has not yet been researched. This sort of localized interference requires a separate investigation. (2) Another reason could be that some interference features that were once evident have been lost or obscured through later changes.¹⁷⁹ (3) The third, and one of the more common explanations, is that, as Batibo noted in Tanzania, in some cases the L₁ disappears without leaving any linguistic traces.¹⁸⁰ This third reason seems the most plausible in the case of Tocharian as well. Namely, as Thomason and Kaufman noted, “many processes of language shift leave no linguistic traces in the target language (TL).” This is the case of “shift without interference.” That is, “if the shift takes place over long centuries, then the shifting population is likely to be truly bilingual in the TL. In such a case, there is no imperfect learning and consequently no interference in the TL.” This happens so that “the substrate population first becomes fully bilingual (“accent-free”) during a long period of constant contact with TL speakers.”¹⁸¹ I believe this happened in the case of Tocharian as well, as the process of language shift in Tocharians also took place over several centuries, from 866 CE until the first or second half of the thirteenth century, i.e., for about 350–400 years.

Socio-anthropological traces have not yet been researched either. However, the probability that such traces will be found at all is very low. For centuries, Islam has eliminated socio-anthropological differences. What might have remained is probably virtually unrecognizable. There are many barriers to conducting research in the areas once inhabited by Tocharians, but it is worth trying.

As for the physical anthropological traces, we are quite lucky because traces of the Tocharians remain to this day. Individuals with blue eyes, blond hair, and European anthropological characteristics can often still be found in certain areas once inhabited by Tocharians. In the early summer of 2012, I traveled to the cities of Hami (Kumul) and Ürümqi in eastern Xinjiang and visited that region. During my visit to one of the large weekly markets of Uyghurs in Hami, I saw two little Uyghur girls with blue eyes, blond hair, and European anthropological features in the market. Their headscarves were not

¹⁷⁹ Thomason / Kaufman 1991: 114.

¹⁸⁰ Batibo 1992: 22.

¹⁸¹ Thomason / Kaufman 1991: 41, 47, 119–120.

properly tied, revealing their blond hair. I did not dare to photograph them. When I showed them to my Uyghur guide and explained that they are the Uyghurized descendants of the Tocharians, he said there were many of them there. He said that he always wondered about this difference, but he did not know that they were the descendants of the Tocharians. Fortunately, a little later, I also saw a Uyghur boy in his teens in the market. I took a photo of him with his permission (Figure 1).



Figure 1

As can be seen from the photo, in physical anthropological terms, he seems to be a Europoid or Caucasoid. On the same day, I also visited a Uyghur village, where I saw a blond little girl with blue eyes without a traditional headscarf. Thus, it is clear that physical and anthropological traces are still present in and around Hami. However, in Ürümqi and its surroundings, I did not meet such individuals. Some of the reasons that the physical anthropological traces are relatively better preserved in Hami and its surroundings may be that (1) that region is on the periphery of the Uyghur area and (2) that the Islamization of that region was relatively late, in the fifteenth and sixteenth centuries, and therefore the Buddhist descendants of Tocharians in that region adapted to the Uyghur culture relatively late. They could have lived in endogamy for a long time before converting to Islam. (3) Since it is a very peripheral

and relatively underdeveloped region, it is not subject to the large population mobility that Ürümqi and other large and central Uyghur cities are subjected to.

Tocharologist W. Winter's comment on the physical anthropological traces in the Uyghur regions also points to a similar phenomenon: "This assumption of a gradual Turkization is based not only on observations of modern travelers, who indicate that among the speakers of Turkish [i.e., Uyghur, H.A.] of the region, people of a totally different outward appearance are fairly common, an appearance which marks them as non-Mongolian, non-Iranian in radical affiliation; the assumption rests also on documents of the time itself."¹⁸² Before it is too late, it would be worth researching and collecting physical anthropological data—maybe also socio-anthropological ones, if any—in and around Hami and in other Uyghur regions. Human genetics and genomics research on the individuals in question could provide interesting data on the Tocharians.

SUMMARY

In the above, I tried to demonstrate factually and theoretically what happened to Tocharians and when, how, and why they disappeared. In order to do this, I had to first clarify the Turkic background of Tocharian–Turkic language contact. I began with the periodization of Tocharian–Turkic language contacts first since, until now, we did not know when and where these relationships started. My working hypothesis, based on the most current archaeological, historical, philological, and linguistic data, is that the Tocharian–Turkic interethnic and linguistic connections can be roughly split into three major stages: (1) twenty-eighth–third century BCE; (2) second century BCE–sixth century CE; (3) sixth–seventh and ninth–thirteenth / fourteenth centuries CE. This is open to reconsideration or refinement in light of new research results and discussion. This periodization is one of the key results of this study.

The most important finding of this study is undoubtedly the answer to the question, "What happened to the Tocharians?" According to the general prevailing view, the Tocharians and the Tocharian languages had disappeared by 800. However, this study clearly shows that many historical, philological, and linguistic facts do not support that opinion. Rather, the facts clearly show that the decline of Tocharian languages and culture actually started when they came under the rule of Tibetans

¹⁸² Winter 1984: 11.

in 790 CE. This is the reason that Tocharian as a writing code ceased to exist for the domains of religion, administration, and economy after approximately 800 CE. This suppression continued with the arrival of the Uyghurs in 840–866 and was completed when the western Tocharians came under the rule of Karakhanid Turks by the middle of the eleventh century. The study tries to reconstruct every stage of the Turkization and language shift processes of the Tocharians in a flowchart that can be summarized as follows:



loss of cultural prestige

cultural change → the cultural dominance and prestige of Tocharians end



loss of linguistic prestige

the Tocharian languages, as the bearers of Buddhist culture and cultural prestige,
lose their importance and prestige



bilingualism

predominance of L₁ (early eleventh century = SI B Toch 11 → late eleventh century = Kashgari)

TochB–Karakhanid Turkic; TochA (Argu)–Karakhanid Turkic; TochB–Uyghur.

Tocharian recedes into the background (*covert prestige*) → Turkic and Uyghur emerge as prestige languages (*overt prestige*) plus demographic and extralinguistic factors → dissolution of the linguistic unity of the Tocharians → intergenerational language transmission still operates



language loss

gradual decline of L₁, predominance of L₂ (late twelfth–early thirteenth century)

intergenerational language transmission still operates to a limited extent → restricted use or competence in L₁, first at the individual/family level → semilingualism → agrammatism, congruence problems, an inadequate knowledge of the norm, simplifications, unanalyzed / incorrect lexical forms, phrases, misspellings, etc. (e.g., THT 296) → restricted use or competence in L₁ at the societal level



language shift

abandonment of the non-dominant L₁ → shift to the dominant L₂ → L₁ is fully replaced by L₂ →
intergenerational language transmission does not operate any longer →
the Western Tocharian language, TochB, is abandoned (ca. late thirteenth century)



language death

(a) extinction of Western Tocharian (TochB)

twelfth / thirteenth century in the Karakhanid area; late thirteenth century in the Uyghur area

(b) extinction of TochA (Argu) in the Karakhanid area: thirteenth century

(c) extinction of TochA in the Uyghur area; late eleventh century(?)

Another important result of the study is the determination that *Argu*, a bilingual Karakhanid tribe in the late eleventh century, is a Tocharian tribe (see Event 2). According to Kashgari, the Argu were bilingual and had a certain “slurring” in their utterances. Kashgari gave the location of Argu (< *Argi* < **Arki* > *Ārsī*) in the south of the Ili Valley, where Chinese sources mention Yuezhi (TochA speakers) who migrated there from Gansu (China) in 162 BCE. Thus, the Argu were undoubtedly the descendants of Yuezhi, and their language was TochA. This phenomenon is very important in terms of Tocharian history and language history narrowly and more broadly in terms of the history of IE peoples in Central Asia. Future archaeological research in the region may provide important contributions to Tocharian and Yuezhi history.

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ABBREVIATIONS

| | |
|-------|--|
| Chin. | Chinese |
| CTu. | Common Turkic |
| EMC | Early Middle Chinese, see Pulleyblank 1991 |
| Gr. | Greek |
| Hun. | Hungarian |
| KBTu. | Karachay-Balkar Turkic |
| Khot. | Khotanese |
| Kzk. | Kazakh |
| LH | Late Han, see Schuessler 2007 |
| MTu. | Middle Turkic |
| Mo. | Mongolian |
| OTu. | Old Turkic |
| OTo. | Old Tocharian |
| OUyg. | Old Uyghur |
| PPTu. | Pre-Proto-Turkic |
| PPTo. | Pre-Proto-Tocharian |
| PTo. | Proto-Tocharian |
| PTu. | Proto-Turkic |
| SL | source language |
| Sog. | Sogdian; see Gharib 2004 |
| SSTu. | South-Siberian Turkic |
| TochA | Tocharian A |
| TochB | Tocharian B |
| Tu. | Turkish |
| WOTu. | West Old Turkic |

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